

LEADERSHIP COMPETENCIES FOR EFFECTIVE IT PROJECTS EXECUTION IN A COMPANY IN THE WESTERN CAPE PROVINCE OF SOUTH AFRICA.

By SONWABO MAKUNGA

Dissertation submitted in partial fulfilment of the requirements for Master of Technology: Business Administration in Project Management in the Faculty of Business and Management Science at the

Cape Peninsula University of Technology

Supervisor: Dr L.E. Jowah

Cape Town

November 2019

CPUT Copyright Information

The thesis may not be published either in part (in scholarly, scientific or technical journals), or as a whole (as a monograph), unless permission has been obtained from the university

DECLARATION

I, **SONWABO MAKUNGA**, declare that the contents of this dissertation represent my own unaided work, and that it has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily of those of the Cape Peninsula University of Technology.

()	27 MARCH 2020
Signed	Date

ABSTRACT

A large number of IT projects fail due to uncertainties involved in these projects. Some of these uncertainties include the changing of specification of the original project and the cause of that can be attributed to the ever changing IT environment. These changes lead to scope creep which causes cost and schedule overruns. For IT projects to be pronounced as being successful, they have to be completed within the specified time, budget, and according to quality. To run successful IT projects is always a difficult task due to the fact that project managers lack the necessary skills and competencies. There is a great need for project managers that are competent in managing budget, time, and quality in IT projects. The poor management of IT projects is a global challenge; it's not only happening in South Africa. In this study the researcher adapted the use of both qualitative and quantitative research methods to evaluate competencies of the project manager with the aim of determining those that would assist project managers to execute successful IT projects. The current study focuses on the competencies that make IT project managers to run successful IT projects, these are Leadership competencies to influence and persuade project team to follow a certain direction, Communication competencies to communicate all the project information effectively to relevant stakeholders, **Decision making** competencies to make crucial decisions in a timely fashion, **Problem solving** competencies to provide needed solutions on critical problems.

Key words: Project Manager, Leadership, Followership, Leadership Competencies, Leadership styles, Knowledge areas

ACKNOWLEDGEMENTS

I would like to say thank you to thank:

- 1. Nontembiso Makunga (Mother) for everything she has done for me, no words can express gratitude.
- 2. Dr. L.E. Jowah for the guidance, coaching and support throughout this study.
- 3. Mrs. K. Sebola and Miss S. Mthyobile for their assistance with regards to queries related to my funder (Services Seta Bursary).
- 4. Nitini Ndamase for taking care of my family.
- 5. GOD almighty for keeping us safe all the time.

DEDICATIONS

I dedicate this work to my MOTHER, Nontembiso Makunga, thank you very much for being a pillar of my strength. I pray to GOD that he may keep you safe for many more years to come.

LIST OF TABLES

Table 1.1: Ten Project Management knowledge areas	3, 4
Table 1.2: Process groups	5
Table 1.3: Mapping of Knowledge areas, Process groups, and 47 processes	6
Table 1.4: Comparisons between Management and Leadership	8
Table 2.1: High Level comparison: PMBOK vs. PRINCE2	30
Table 2.2: Comparing processes	31
Table 3.1: Six leadership styles	32, 33
Table 3.2: Some of the characteristics of a transformational leader	37
Table 3.3: Similarities Transformation and Servant leadership	39, 40
Table 3.4: Comparison: transformational and transactional leadership	43, 44
Table 3.5: Ten rules of followership	47
Table 4.1: Research design vs Research methodology	50
Table 5.1: Employees age	59
Table 5.2: Level of education	59, 60
Table 6.1: Years working in the IT project execution	94
Table 6.2: Communication competency	94, 95
Table 6.3: Decision making competency	96
Table 6.4: Leadership competency	97
Table 6.5: Problem solving competency	98

LIST OF FIGURES

Figure 1.1: Project management competencies framework	2
Figure 1.2: Leadership continuum	10
Figure 1.3: The Situational Leadership Model	12
Figure 1.4: Reasons to follow leaders	15
Figure 1.5: Leadership – Followership continuum	16
Figure 1.5: Conceptual framework	18
Figure 2.1: Graphical representation of the five phases of the project	22
Figure 2.2: Graphical representation of the 10 knowledge areas	23
Figure 2.3: Stakeholder Analysis	29
Figure 3.1: Graphical representation: Transformational and Transactional leaderships	34
Figure 3.3: Model of the full range leadership suboptimal profile	43
Figure 3.4: Diagram depicting the opposite ends of the continuum	44
Figure 3.5: Follower analysis	46
Figure 4.1: A research model	50
Figure 5.1: Position held by the respondents in the organisation	59
Figure 5.2: Years which employees have been involved in IT projects	61
Figure 5.3: How long respondents have been working for the organisation	62
Figure 5.4: Unable to effectively communicate project objectives	64
Figure 5.5: Communicates work progress to stakeholders	65
Figure 5.6: Do not listen effectively to other team members	66
Figure 5.7: Forms clear and concise written communication	67
Figure 5.8: Able to distribute information by emails, memos, presentations, reports	68
Figure 5.9: Encourages transparency and the sharing of opinions	69
Figure 5.10: Scrutinizes available information	70
Figure 5.11: Makes decisions based on relevant information	71
Figure 5.12: Brings up sound decisions while representing integrity	72
Figure 5.13: Follows up on decision making process	73
Figure 5.14: Use a rational process in making decisions	74
Figure 5.15: Seek input from relevant stakeholders to increase probability of success	75
Figure 5.16: Does not inspire others to believe in the work they do	76
Figure 5.17: Shares responsibility for success	77
Figure 5.18: Does not provide vision for the project team	78
Figure 5.19: Influence project team to work without being pressured	79
Figure 5.20: Takes a lead in uncertain situations	80
Figure 5.21: Provides trust and reliability to the project team members	81
Figure 5.22: Do not delegate effectively to others	82

Figure 5.23: Not able to identify a problem	83
Figure 5.24: Looks for best solutions when resolving problems	84
Figure 5.25: Exhibits creativity in problem solving	85
Figure 5.26: Collects information related to the problem	86
Figure 5.27: Do not engage the team members in trying to come up with a solution	
to the problem	87
Figure 5.28: Responds quickly to arising problems	88
Figure 5.29: Does not try to reach amicable solutions	89
Figure 6.1: Level of education	92

APPENDICIES

Annexure A 113, 114, 115

GLOSSARY

ABBRIVIATION

FULL WORD

CPM Critical Path Method

PM Project Manager

IT Information Technology

PMBOK Project Management Body of Knowledge

PRINCE2 PRojects IN Controlled Environment Version 2

PERT Program Evaluation and Review Technique

WBS Work Breakdown Structure

TABLE OF CONTENTS

DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
DEDICATIONS	
LIST OF TABLES	v
LIST OF FIGURES	vi
APPENDICIES	i
GLOSSARY	
CHAPTER 1:	
INTRODUCTION OF THE STUDY, BACKGROUND INFORMATION INCLUDING PROB	
1.1 INTRODUCTION	
1.2 BACKGROUND LITERATURE REVIEW	
1.2.1 Hard leadership competence	
1.2.2 Soft leadership competence	
1.2.3 Project management leadership	
1.2.4 Leadership theories	
a) Trait theory:	9
b) Behavioral theory:	9
c) Leadership style theory	9
d) Contingency leadership theory	11
e) The Situational Leadership theory	11
f) Transactional leadership theory	12
g) Transformational leadership theory	13
1.2.5 Leadership power	13
1.2.6 Followership	14
1.3 PROBLEM STATEMENT	10
1.4 RESEARCH OBJECTIVE	17
1.4.1 Primary objective	1
1.4.2 The secondary objective	1
1.5 RESEARCH QUESTION	1
1.5.1 Main question;	17
1.5.2 Sub-questions:	1

1.6 RESEARCH DESIGN AND METHODOLOGY	17
1.6.1 Target population	18
1.6.2 Sampling and sample size	18
1.6.3 Data collection	19
1.6.4 Data analysis	19
1.7 ETHICAL CONSIDERATION	19
1.8 CHAPTER SUMMARY	20
1.9 CHAPTER CLASSIFICATION	20
CHAPTER 2:	21
PROJECT MANAGEMENT BODY OF KNOWLEDGE – TEN KNOWLEDGE AREAS	21
2. 1 INTRODUCTION	21
2.2 BACKGROUD OF PROJECT MANAGEMENT	21
2.2.1 Project management knowledge areas	22
a) Project Integration Management	23
b) Project Scope Management	24
c) Project Time Management	24
d) Project Cost Management	25
e) Project Quality Management	25
f) Project Human Resource Management	26
g) Project Communication Management	26
h) Project Risk Management	27
i) Project Procurement Management	28
j) Project Stakeholder Management	28
2.2.2 Comparison between PMBOK and PRINCE 2	30
2.3 CHAPTER SUMMARY	31
CHAPTER 3:	32
TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP STYLES	32
3. 1 INTRODUCTION	32
3.2 BACKGROUND	35
3.2.1 Transformational leadership style	35
a) Idealized influence	35
b) Inspirational motivation	36
c) Intellectual stimulation	36
d) Individualized consideration	36
3.2.1.1 Impact of transformational leadership on employees	37

3.2.1.2 People considered being successful transformational leaders	38
3.2.1.3 Pseudo Transformational leaders	38
3.2.1.4 Criticism of Transformational leadership style	39
3.2.2 Servant leadership	39
3.2.3 Transactional leadership style	40
3.2.3.1 Criticisms of transactional leadership	42
3.2.4 Differences between Transformational and Transactional leadership	43
3.2.5 Followership	45
3.3 CHAPTER SUMMARY	47
CHAPTER 4:	48
RESEARCH DESIGN AND RESEARCH METHODOLOGY	48
4.1 INTRODUCTION	48
4.2 RESEARCH DESIGN	48
4.3 RESEARCH METHODOLOGY	49
4.4 RESEARCH STRATEGY	51
4.5 TARGET POPULATION	51
4.6 POPULATION VALIDITY	52
4.7 SAMPLE SELECTION AND METHODS OF SAMPLING	52
4.8 SAMPLE SIZE	53
4.9 METHOD OF DATA COLLECTION	54
4.10 DATA ANALYSIS	54
4.11 VALIDITY AND RELIABILITY	55
4.12 SAMPLING BIAS	55
4.13 ETHICAL CONSIDERATION	56
4.14 ASSUMPTIONS MADE	57
4.15 SCOPE AND LIMITATION OF THE STUDY	57
4.16 CHAPTER SUMMARY	57
CHAPTER 5:	58
DATA REPORTING, ANALYSIS AND INTERPRETATION OF THE RESEARCH RESULT	'S 58
5.1 INTRODUCTION	58
5.2 REPORTING THE RESULTS	58
5.2.1 SECTION A: BIOGRAPHY	58
5.2.2 SECTION B - COMPETENCIES FOR AN EFFECTIVE PROJECT LEADER	63
Communication competency	64
Decision making competency,	69

Leadership competency	75
Problem solving competency,	82
5.2.3 SECTION C - OPEN ENDED QUESTIONS	89
5.3 CHAPTER SUMMARY	90
CHAPTER 6	91
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	91
6.1 INTRODUCTION	91
6.2 DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	92
6.2.1 Section A	92
6.2.2 Section B	94
Communication competency	94
Decision making competency	95
Leadership competency	96
Problem solving competency	97
6.2.3 Section C	98
6.3 CONCLUSION	98
7. REFERENCES	100
ANNEXURE A	112

CHAPTER 1:

INTRODUCTION OF THE STUDY, BACKGROUND INFORMATION INCLUDING PROBLEM STSTEMENT

"A prime function of a leader is to keep hope alive" - John W. Gardner

1.1 INTRODUCTION

In the 21st century there has been a great interest shown by scholars to study leadership (Hunter et al., 2007: 435-446). Benator and Thumann (2003: 3) define leadership as a method of influencing people or teams to accomplish goals set in an organization, assuming that the people or teams understand what the goals are, and how to go about achieving those goals. According to Dulewicz (2005: 105–123), leadership, is stated as one of the critical competencies necessary where human beings interact with intentions of achieving the same goals. Gruban (2003: 44) posits that a competence is an individual's ability to utilise knowledge that they have acquired over the period to assist in directing others towards the successful accomplishment of a common challenge. This leads to the realisation and achievement of the, set goals, or an overall performance of a particular role in the business process. The competency of a project leader is a mixture of knowledge, expertise, skills, motives, values, beliefs, core personal and behavioural traits.

A combination of these in a particular environment may assist in bringing about the desired performance (Boyatzis, 2008: 5-12) measured through the achievement of set goals and deliverable tasks. The responsibility of a project manager in a project is essentially one of coordination and integration of the different tasks and operations which together make up the completed project. Barna (2013: 17-21) opines that project managers work to make sure that a balance between the different project knowledge areas is achieved for the benefit of successfully completing the project. The project knowledge areas have been identified as communication, human resources, risks, scope, time, procurement, cost, and quality and project processes: initiating, planning, executing, controlling and the closing out phase. Project management is defined in the PMBOK Guide (2013) as the use of knowledge acquired over time, soft and/or hard skills, tools, and techniques to meet the project identified objectives.

1.2 BACKGROUND LITERATURE REVIEW

As mentioned in the above literature, the part which explained the competence of the project manager, this study will focus on the **soft** and **hard** leadership competencies of a project manager. These two competencies work hand in hand towards the achievement of a set goal with clearly defined deliverables, which are the scope. It is stated in PMBOK guide (2013) that PM competence should encompass a broad range of both soft and hard leadership competences. Barna (2013: 17-21) is of the view that it takes years of hard work to build up abilities, skills and capabilities that will enable effective and successful project execution. Some scholars propose that competencies take years working on a job to achieve them, or an activity to build-up competencies. Crawford (2005: 220-228) argues against this view by stating that knowledge, skills and abilities, by contrast, can come with entry-level employees into the job. Figure 1.1 below shows the project management competency framework, which is a combination of hard and soft leadership skills.

Figure 1.1: Project management competencies framework

PROJECT MANAGEMENT COMPETENCIES						
	Skills, capabilities and abilities			Personal attitude		
Technical skill and project management knowledge and expertise	Cooperation and team work	Personal contact and communication	Leadership and control	Working and managing task	The way of thinking and mentality	Feeling and emotions

Source: researchers own construct, adapted from Barna (2013: 17-21)

This framework shows the hard and soft leadership competencies. The technical skill and project management knowledge and expertise are regarded as hard leadership competencies, while Skills, capabilities and personal abilities are soft leadership competencies.

1.2.1 Hard leadership competence

In the IT industry, senior project managers do not want to be involved in the technical aspect of the project, they prefer to leave the technical management to junior project managers, they want to have little technical knowledge as possible about the projects they manage, such as network managers, IT support managers, or programming managers (Barna, 2013: 17-21).

Hard leadership competence deals with the technical skills of actually doing the job (Kennedy, 2016). A project manager for a software development company, you should have a detailed technical skill in computer languages such as C++, Java, and Python. According to Work2future Skills Gap Analysis (2013), If you are in the IT Support environment, you should be familiar with software such as (Microsoft and, Linux products).

Hard skills differ from industry to industry, we only took an example of an IT industry as this is the main focus of the current study. The Construction industry has different hard leadership competencies from an IT industry, in a civil Engineering industry their competence will be in AutoCAD for creating 3D structures in a computer (Barna, 2013: 17-21). There are hard leadership competencies that are similar in all industries, and one of those is for a project manager to be able to do a work breakdown structure (WBS), which is the breaking down of the project into smaller tasks and assign them to project team member (PMBOK, 2013). If organisations feel that their project managers lack these skills in order for them to run successful projects, the said organisation can provide for them professional training to acquire the required skill or if possible they can be guided or coached by an experienced individual (Murch, 2011: 88). According to Barna (2013: 17-21) one aspect is crystal clear, project manager is entrusted with the responsibility to management projects, its technical side or otherwise, and will have to get solution for technical issues if they arise whilst the project is in progress.

Besides the technical skills that the project managers are required to have in their role as leaders in projects, they must also know and understand project management knowledge areas set out in the PMBOK guide. PMBOK guide (2003: 5 - 481) 5th edition outlines 10 project management knowledge areas. According to PMBOK guide (2013: 5 - 481) "a knowledge area represents a complete set of concepts, terms, and activities that make up a professional field, project management field, or specialization". A short depiction of these knowledge areas is given in the table 2-1 below; chapter 2 of this study discusses these knowledge areas in full detail.

Table 1.1: Ten Project Management knowledge areas

Definition
Comprises of processes expected to facilitate and coordinate the
processes of other knowledge areas within the process group.
Comprises of processes expected to recognise and characterize what is
incorporated and excluded in the scope of the project and to control
changes to the scope of the project.
Comprises of processes required to make guarantee that projects or
project activities are finished inside the predetermined time.
Comprises of processes needed to ensure that the projects finish within
the budget allocated them.
This knowledge area comprises of processes expected to guarantee that
the project accomplishes the quality prerequisites set out to be achieved
This knowledge area comprises of processes required to amass, organise
manage the project team.
This knowledge area comprises of processes needed to ensure that the
correspondence infrastructure is accessible for complete communication
of project information between all the project stakeholders.
Comprises of processes which are concerned with conducting risk
management planning, identification, analysis, responses, and monitoring
and controlling in a project.
This knowledge area comprises of processes required to guarantee the
procurement of services, products and/or information from sources other
than the project team in order to conduct a project.
These are processes expected to recognize who the project stakeholders
are, what the impact they have on the project, and how to keep them
satisfied.

Source: own construct, adapted from PMBOK guide (2013: 5 - 481)

According to Katz (2007:1 -109) the 10 Knowledge areas in PMBOK guide 5th edition cover 47 project management processes. Processes are set of activities and actions undertaken to obtain specified objective PMBOK guide (2013: 5 - 481). Project managers use these processes as detailed roadmaps for directing each project to the right path. When these processes are used effectively,

they assist in removal of confusions and uncertainties among project managers and stakeholders of projects. Each process is housed within one of five process groups: Initiation, planning, executing, controlling and monitoring, closing (PMBOK guide, 2013: 5 - 481). Why they are called process groups, someone might ask. It is because each one contains processes that must be performed in a coordinated manner for a project to be a success. These process groups represent the stages in the project management life cycle. Table 1.2 below explains these process groups.

Table 1.2: Process groups

Process	Definition						
Initiation	The definition of scope, goals, deliverables, and limitations of the project is done						
	in this process stage.						
	Created documents: Project charter and stakeholder register.						
Planning	Plans such as the Communication plan, Project plan, Risk management plan,						
	work break down structure plan etc., are developed in this process group.						
	Created documents: Project Management Plan, schedule, risk register.						
Executing	Tasks set out in the WBS are executed; project team management, doing						
	quality assurance, and conducting procurement are just some of the process						
	performed in this phase.						
	Created documents: None, only updates are done.						
Monitoring	This is under these processes where the monitoring and controlling of costs,						
&	quality, budget, time, communication, risks and procurements.						
Controlling	Created documents: None, only updates are done.						
Closing	Project is intentionally terminated because requirements have been met, closing						
	all the processes, team members released to other projects, and final						
	reporting gets done, getting a sign-off and acceptance from client/customer.						
1							

Source: own construct, information acquired from PMBOK guide (2013: 5 - 481)

The project therefore is an undertaking comprised of phases and stages from start to completion. By implication all the stages have to be undertaken with the understanding that one leads to the other. May be a critical element to be noted here, as implied in the knowledge areas is, projects are designed by people, implemented by people and executed for people. To bring all this to fruition, the ten knowledge areas are indispensable. The mapping of these ten project knowledge areas, Process groups and forty-seven processes are depicted in table 1-3 below.

Table 1.3: Mapping of Knowledge areas, Process groups, and 47 processes

Knowledge	Project Management Process Groups				
Areas	Initiating	Planning	Executing	M & C	Closing
Project Integration Management	Develop Project Charter	Develop Project Management Plan	1. Direct & Manage Project Work	M&C Project work Perform Integrated Change Control	Close project or Phase
Project Scope management		Plan Scope Management Collect Requirements Define Scope Create WBS		1. Validate Scope 2. Control Scope	
Project Time Management		Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule		1. Control Schedule	
Project Cost Management		1. Plan Cost Management 2. Estimate Costs 3. Determine Budget		Control Costs	
Project Quality Management		Plan Quality management	Perform Quality Assurance	Control Quality	
Project Human Resources		Plan Human Resource	Acquire Project		
Management		Management	Team 2. Develop Project Team 3. Manage Project Team		
Project Communication Management		Plan Communications Management	Manage Communicat ions	Control Communicati ons	
Project Risk Management		Plan Risk Management Identify Risks Perform Qualitative Risk analysis Perform Quantitative Risk analysis Perform Risk analysis Plan Risk Responses		Control Risks	
Project Procurement Management		1. Plan Procurement Management	1. Conduct Procurement	1. Control Procurements	Close Procurem ents
Project Stakeholder Management	Identify Stakeholders	Plan Stakeholder Management	Manage Stakeholder Engagement	Control Stakeholder Engagement	

Source: own construction, information taken from PMBOK guide (2013: 5 - 481)

In each project, the project management team has a responsibility of selecting those processes which will enable them to meet project requirements, on time, scope, and budget (triple constraints). Almost all projects usually use the same set of processes to accomplish project management successfully.

1.2.2 Soft leadership competence

Soft skills are the manager's personality traits and the way he relates to other human beings. These may involve among others, communication, emotional intelligence, ability to negotiate, good listening, empathy and a focus on productivity through improved human relations (Barna, 2013: 17-21). These taken together with the hard skills – have the ability to do the actual tasks, help in the building of a stronger and production focused team. This is what differentiates leaders from managers, in that they focus on the agents that are used for the execution of the tasks, and as long as these are satisfied, job satisfaction brings about productivity (Munich, 2011: 89). One of the competences highlighted in the above literature is leadership, which is the main focus of the current study. Researchers define leadership differently, the only common thing about all these definitions is that all leaders lead people who become followers and not subordinates. Below are just some of the examples of the definitions of this phenomenon from different researcher's point of view.

- According to Jowah (2016:10-17) leadership is involves a relationship in which one person, who is regarded as the leader, influences and motivates others to work towards achieving an objective and goal of an organisation.
- Mazibuko, Tait and Jowah (2015: 313-335) defines leadership as the effectiveness of a leader in getting their ideas accepted by their followers or subordinates and being able to guide their followers on how to accomplish a task.

The two definitions agree that for leadership to occur there should be an individual, who in most cases is thought to be a leader who exerts intentional influence over followers, group of people or individual. In the current study, we will adopt the definition from Kouzes and Postner (2002: 102) who define leadership as the process which involves an individual who influences and motivates others to follow a certain path. This leader needs to inspire and encourage other people – the followers, to works towards the accomplishment of shared organizational vision and objectives. Flanagan & Jacobsen (2003:124-142.) are of the view that there is a difference between management and leadership. Although this study will not focus much on differentiating these two, it is of best interest of the reader to get a picture of how they differ. Kotter (1990:72) described the differences between management and leadership in terms of the core processes and required outcome, by stating that management is focused on producing predictability and order by:

Setting operational goals, allocating resources, creating action plan with timeframes

- Organizing and staffing
- Monitoring/Controlling results and solving problems

While leadership is focused in producing organizational change by:

- Clearly detailing the vision of an organisation
- Clearly stating the vision to the team.
- ❖ Influencing, motivating, inspiring, aligning followers on how to achieve the vision.

Table 1.4 below, shows the comparisons of the key duties of a manager as compared to that of a leader

Table 1.4: Comparisons between Management and Leadership

Management	Leadership
 Planning and budgeting 	 Creating vision and strategy
 Organizing and coordinating 	 Creating shared culture and values
 Directing and controlling 	❖ Helping team to grow
 Creating boundaries 	 Minimize boundaries
❖ Focus on objects – goods and services	❖ Focus on people – inspire, motivate team
❖ Based on position power	❖ Based on personal power
❖ Boss	❖ Coach, Mentor, Facilitator, servant
 Emotional distance 	 Emotional connections (heart)
❖ Expert mind	 Listening (communication)
❖ Talking	❖ Open mind (mindfulness)
❖ Conformity	Non-conformity (courage)
❖ Insight into organization	 Insight into self (integrity)
Implementation of the leader's vision	Articulation of an organizational vision and
and changes introduced by leaders,	the introduction of major organizational
and the maintenance and	change; provides inspiration and deals with
administration of organizational	highly stressful and troublesome aspects of
infrastructures.	the external environments of organizations.

Source: own construction, data taken from Kotter (1990: 66), Jowah (2015: 15-39)

According Kotter (1990: 66) management was sufficient enough to make an organization successful in the 20th century, but with the ever changing business environment we find in the 21st century, organization no long rely only on management alone, critical leadership practices are required for businesses to be successful.

1.2.3 Project management leadership

Zimmerer and Yasin (1998: 1-13) conducted a research on the leadership profile of American project managers, the findings of this research were that, there was a need for project managers to put their main focus on the leadership of the teams. According to Zimmerer and Yasin (1998: 1-13), 76% of the project success can be attributed thereto. Yang et al., (2011, 258-267) posits that leadership theories in project management since their inception many years ago were trying to show that there is a positive relationship between the good leadership and project success. Below is an overview of some of the popular leadership theories covered by researchers.

1.2.4 Leadership theories

a) Trait theory:

Yukl (2006: 53) defines the term trait as a variety of individual attributes, including aspects of personality, needs, motives, and values. The trait theory stated that leaders are born and not made; this view was based on the psychological focus that argued that leaders were born with inherited traits (Yukl, 2006: 53). Cleveland, Stockdale & Murphy (2000:1-478) also pointed out that some researchers report that the leadership traits that differentiate great leaders from not so great leaders are inherited.

b) Behavioral theory:

Scholars argue that leaders are made and do not inherit leadership skills. Blake and Mouton (1985:89) argued against the notion that great leaders are born and not made and stated that great leaders are made. According to Ulrich, Zenger and Smallwood (1999: 1-256) It doesn't matter what the person's characteristics might be, the focal point must be on the results of the organisation as far as they affect employees, regulatory bodies, customers of the organisation, and its investors. Hellergriel, Jackson, Slocum, Amos, Klopper, Louw & Oosthuizen (2004:110) stated that behavioural theory did not find a leadership styles that was suited for all situations. Then the creation of the contingency theory became the next step in the evolution of research about leadership. One example of behavioral theory is leadership style theory.

c) Leadership style theory

Lewin, Lippett & White, (1939: 271-299) conducted studies which focused mainly on leadership styles, and the leadership styles that were studied are: Autocratic, democratic, Laissez-faire leadership styles.

- ❖ Autocratic leadership style according to likert (1967:115) autocratic leaders make decisions alone without any inputs from subordinates, these kind of leaders tell employees what to do and then closely monitors workers to see that the job is being performed. According to the researchers, this kind of leadership best suited for situations where there where the leader is the most knowledgeable person in the group, and also in situations where there is little time for group decision-making (Lewin et al., 1939: 271-301).
- ❖ Democratic leadership style A leader who applies this kind of style encourages participation in decision making. The leader will determine what needs to be done by the employees and then trust them to do it without constantly monitoring them (likert, 1967:115). Both the manager and subordinate work hand in hand in making decisions.
- ❖ Laissez-faire leadership style According to Northouse (2004:44) in Laissez-faire leadership a leader chooses not to involve them-selves in any decision making, they let employees to fend for themselves without any assistance from the leader. This style is said to be a "handsoff" approach kind of leadership. Leaders who use this style give team members freedom to make decisions and do not assist them in any way.

A leader may use an autocratic approach or democratic approach, or they may use a combination of these leadership styles when dealing with employees. A leadership continuum is shown in the figure 1.2 below

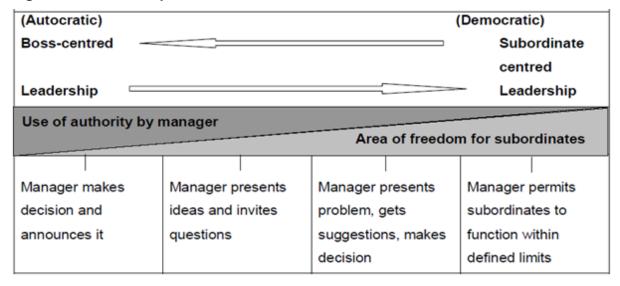


Figure 1.2: Leadership continuum

Source: Tannenbaum & Schmidt (1973: 162 - 180).

In the figure above boss-centred leadership style alludes to the extent to which leaders take charge and control to get the work done according to the specifications. Leaders give directions their subordinates by communicating to them clear goals/objectives, while managers on the other hand tell employees what needs to be done and how it is done when they work towards goal achievement

(Likert, 1967:118). According to Likert (1967:118) employee-centred leadership style alludes to the degree to which leaders focus on meeting subordinate's human needs whilst building relationships. Leaders are delicate to their subordinates and communicate to build trust, support, and respect, while making sure that their welfare is being looked after

d) Contingency leadership theory

Gerber, Nel & Van Dyk (1996:33) contingency theory suggests that no single leadership style will accommodate all situations in an organisation, leaders use different leadership styles for different circumstances in an organisation. There are no one size fits all leadership style. According to Robbins (2003:88) contingency scholars argue that past theories failed because they ignored the reality that management style and organisational structure were impacted by different perspectives of the environment. Northouse (2004:27) concurred with Robbins view when he stated that the main focus of previous theories was on contextual factors that influenced the leadership style to be used; these past theories were concerned with leadership styles and the situations and not necessarily with the level of leadership. Over the years, countless approaches have been advanced to try to determine the contextual factors that have an impact on the effectiveness of the interaction between the leader and their subordinates. The contingency theory shifted from just looking into the leader alone and began focusing on leaders in conjunction with the circumstances the leaders work under.

e) The Situational Leadership theory

This theory is utilised to decide which of four leadership styles: selling, telling, participating, and delegating fits the circumstance to maximize performance (Hersey & Blanchard, 1969: 79). According to Martin et al., (2006:60) these model assist leaders to decide on the leadership style to utilize in any given situation. The leadership styles identified under this theory can be described as follows:

- Telling Leaders make decisions without asking for any input from their followers. When interacting with employees, leaders give detailed instructions, describing exactly what task needs to be accomplished and when, and how to accomplish the said task.
- Selling In this leadership style, the leaders guide their team and also encourage interaction and dialogue, and also provide explanations to questions asked by team members.
- ❖ Participating The leader interacts with the team members when setting the goals in an organisation. Leaders ask for inputs from their team about decisions to be made but retain the authority of making the final decision. They build and develop their teams through collaborations, encouragement, and facilitation.

❖ Delegating – This is one way that leaders develop their team members; a leader allow members in the team to take some of responsibilities that are usually placed under the leader, the leader will only monitor and account for his/her team. The situational leadership model is illustrated in figure 1.3 below. The figure shows the relationship bahavior and task bahaviors of a leader as explained in the above passage.

Figure 1.3: The Situational Leadership Model



Source: Hersey and Blanchard (1977:80).

In a situation leadership model, a situational leader must be able to understand what their followers need, then adjust their management style to cater for those needs. The leader should be able to evaluate each and every follower's maturity and competence, in order for them what they can improve in their followers. These leaders should be able to get trust and confidence from their followers.

f) Transactional leadership theory

Rewards and punishment system is what the transactional leadership theory is built upon (Charry, 2012). According to Bass (1997: 130 - 139) for transactional leadership to be successful, there is an exchange relationship/contract built between the leaders and follower. This exchange can be in the form monetary terms, time off or whatever the leader and a follower agree upon. Leader explains clearly what is expected from follower. If the follower meets what he/she agreed upon with the leader, they get rewarded and contrary to that, they are punished. According to Bass (1990: 93) in a transactional leadership relationship, subordinates are enticed with rewards and benefits by the leader, in a quest to motivate them to accomplish tasks in accordance with specified requirements. Transactional leadership works in two distinctive models: contigent rewards and management by exception (Bass, Avalio and Atwater, 1996: 5-34). Tichy & Devanna (1990: 111) stated that

transactional leadership worked well in business arena prior to the 1980s where there are more steady environments with small or no competition. However, the 21st century business environment is agile and fast paced, and it requires a leadership style that will ensure the organisations survival and superior performance, scholar believe that transformational leadership is that leadership style.

g) Transformational leadership theory

Transformational leadership theory was created as a method to transform organisations and the people (Bass & Avolio, 1994: 42). This transformation is believed to be achieved by inspiring, motivating, developing, and intellectually stimulating people in an organisation by using the four dimensions of transformational leadership: Idealized attributes and behaviours, intellectual stimulation, individualized attention, and inspirational motivation (Burns, 1978: 72). Many scholars have stated that, in many organizations that people are motivated to perform exceptionally, they have trust, admiration and respect for their leaders. According to Bass (1985: 169) transformational leaders aim to alter the minds and hearts of their followers, broaden the vision of an organisation; they make sure that there is a clear purpose. Transformational leader's main focus is on the empowerment and development of their team's potential for the accomplishment of long-term objectives (Shaw, 2007: 106). A study by Bass, Avolio, & Goodheim (1987: 7-19) came to a conclusion that transformational leadership is an extension of transactional leadership in the accomplishment of high levels of performance by followers; Transformation leadership adds extra motivational strategies to transactional leadership in-order to attain goals.

1.2.5 Leadership power

Hersey et al. (1979: 418) in their study recognized that a leader must use power to influence their followers and will not be able to influence other people without the use of power. Erkutlu and Chafra (2006: 285-297) separated the five sources power: Legitimate, Expert, Referent, Reward, and Coercive power into two classes: position power and personal power. Erkutlu and Chafra (2006: 285-297) explained position power as the power given to a person when they hold a specific position within an organizational. Position power incorporates legitimate power, reward power and coercive power. Personal power is the power that is derived from an individual's personal attributes, and incorporates referent power and expert power (Vredenburgh and Brender, 1998: 1337 - 1347). A brief description of these five power bases is as follows:

- ❖ Legitimate This power includes the individual's capacity to utilize their position and authority given to them by an organization, establishment, group or team.
- ❖ Expert is derived from the perception that someone uses their knowledge and expertise acquired over time in a specific field, for example, being a professor in of a University and using your knowledge when working in your team.

- ❖ Referent The leader's capacity to influence their followers, because the followers admire, respect, loyal and wish they can be the same as their leaders one day. For instance, athletes respect and admire their coaches, and take after their decisions. Take Mamelodi Sundowns as an example, this is the most successful team is South Africa, being able to win the domestic league three times under the current coach, and went on win against African teams when they played for the African champions league, this is because the players are influenced by the head coach and then admire and respect him.
- ❖ Reward This leadership power refers to the ability of a leader to be able to reward their followers when they do good, this can be achieved by giving them monetary rewards, certificates of recognition or just by saying thank you when their followers perform very well.
- ❖ Coercive Leaders influence their followers by threatening them punishment if they do not follow instructions given by the larder. Some of the punishments that followers are threatened with are: demotion, termination, suspension or a privilege being taken away from a follower.

Different forms of power can be used by a leader, these leaders may select which leadership style to use with which power (Kreitner, 2009:420). The project manager' capacity to use powers of expert, referent and formal authority assumes an indispensable part in the achievement or failure of a project. Referent and formal authority powers assist the manager to impact the project team positively; however, the authority power can negatively affect the project manager's capacity to impact the project team (Mullenburg, 2000:66). The leadership skills of a project manager, team building, working attitude and co-ordinating the project team members can hold the team together, to run the work easily and to accomplish the correct organisational goals (Kerzner, 2009: 78; Summer, Bock and Giamartino, 2006: 43 - 49). These unique attributes and characteristics empower them to show the vital actions that lead to success of a project (Mulenburg, 2000:66).

1.2.6 Followership

According to the Merriam-Webster dictionary, followership is dictated by the follower's ability or eagerness to take after a leader. Individuals take after a leader for a various number of reasons. Below are some of the reasons people take after a leader.

- Loyalist followers follow their leaders because they are loyal to them.
- Lifeway The follower's prime interest is to serve other people including their leaders. They enjoy working with others, assisting them achieve what they desire.
- ❖ *Dreamer* These followers are not interested in distinguishing the roles of a leader and that of a follower, they are mainly focused on their own objectives. They have their own dreams.

- ❖ Apprentice These followers learn their leadership skills from skilled leaders in an organisation. They are able to develop themselves through mastering the new skill learned from the leader.
- ❖ Disciple Disciples learn the skill by emulating what their leaders do. They learn the leadership methods their leaders use and may lead the same way as their leader.
- ❖ Mentee There is a relationship of a mentor and a mentee. Followers view leaders as a mentors, and mentors have a responsibility of developing their mentees so that they can grow.
- ❖ Comrade Followers enjoy being associated with the leader. They follow their leaders for the purpose of belonging. The figure 1.4 below, show reasons why followers would follow a leader.

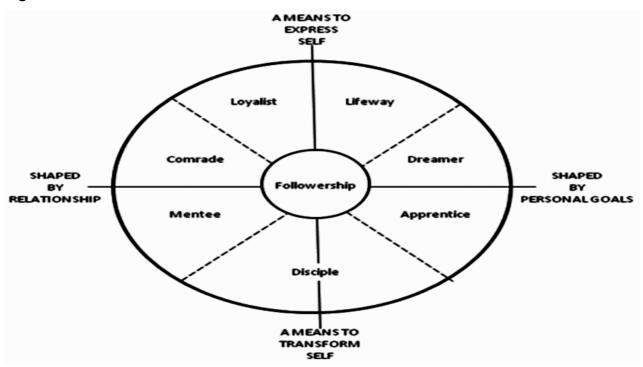


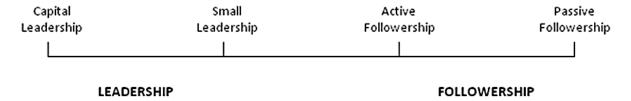
Figure 1.4: Reasons to follow leaders

Source: adapted from Kelley (1992: 1-260)

Dixon & Westbrook (2003: 19-25) the follower-leader relationship is built on the social contract basis where a leader and follower work together toward something. Chaleff (2003: 19) stated that leaders and their followers orbit around a particular purpose; followers do not orbit around the leader.

Figure 1.4 below is a model that depicts the continuum between leadership and followership; this model is adapted from (Townsend and Gebhardt, 2003: 18-21). Capital Leadership and Passive Followership show the extremes of the continuum.

Figure 1.5: Leadership - Followership continuum



Sources: adapted from Townsend and Gebhardt (2003: 1-60)

Capital Leadership on one hand is at the head of an organization, this is where ultimate decision of an organisation making take place. In passive followership followers follow their leader mindlessly, they are not involved in any decision making, and they do whatever the leader tells them to do. In the middle of the continuum are small Leadershipll and active followership. Small leadership calls for a person with effective human abilities/skills to get others to do what the leader requires. Small leadership can also be defined as the personal leadership wherein a person tries to encourage and inspire a number of people to do something right now. In an active Followership, followers are active with their leader in making decisions, they are involved with their leaders every step of the way. Followers ask pertinent questions and provide relevant suggestion to aid in the shaping of decision making by their leaders.

1.3 PROBLEM STATEMENT

A great number of IT projects fail; others fail before they are even finished. This does not only happen in South Africa, but all over the globe. One of the people tasked with ensuring that projects are a success are Project managers. These professionals play a big role in projects. They are essentially the contact point for all the stakeholders involved in the project. They are responsibly for integrating all the functions of an organisation, making sure that projects have all the required resources (Human, capital, and material resources). In order for these project managers to execute their duties and run successful projects in any organisation, they must be a competent professional who are able to use tools, techniques and competencies which are not found within the traditional management approach.

The different environments and circumstances in which the IT project managers work created the need to take a close look at what competencies are needed by effective IT project managers. This study is carried out for the purpose of establishing the leadership competencies that would make IT project management execution a success in the company of the Western Cape.

1.4 RESEARCH OBJECTIVE

1.4.1 Primary objective

The main objective of this study is to identify leadership competencies that IT project managers must poses in order to run successful projects.

1.4.2 The secondary objective

- To investigate if there is a relationship that exists between the leadership style of project manager, project team cooperation and project success (Yang, Huang and Wu, 2010:1-10).
- o To investigate and identify best leadership styles needed for successful project management

1.5 RESEARCH QUESTION

Onwuegbuzie and Leech (2006: 474-498.) in their study argued that research questions in mixed method research are critically important because they, in huge part, dictate the form of research design used, the size of sample and sampling scheme employed, and the type of instruments administered as well as the techniques that are used for data analysis (statistical or qualitative) used. Specific question that informed this research is:

1.5.1 Main question;

What leadership competencies are required for effective IT Projects management?

1.5.2 Sub-questions;

- o What are the expectations of the followers in project execution?
- What is the impact of competencies to follower's performance?
- What are the effects of manager's hard skills to follower's performance?

1.6 RESEARCH DESIGN AND METHODOLOGY

According to Mouton (2001:55) stated that a researcher should use the research design as the researchers plan to conduct research. Text books, project management journals, online journals, and newspaper articles are used to formulate theoretical background of the current study. As mentioned previously in the main objective, this study aims to identify which competencies IT project managers should develop in order to achieve project success. Quantitative method is an appropriate method as the research will use statistical data to answer the research question (Saunders *et al.*, 2012:48). A properly drafted questionnaire will be distributed physically by the researcher to the respondents. According to Saunders *et al.*, (2012:48) quantitative research is in most part associated with positivism, particularly when utilized with predetermined and highly structured data gathering as in the case of this research. This research is explanatory in nature. Saunders *et al.*, (2012:48) posits

that explanatory studies always look to find causal relationship between variables of a study. This study must be seen as a process of enquiry to establish causal relationships between Project leadership competencies and the success of the project. The figure below depicts the conceptual framework used for the current study

Figure 1.5: Conceptual framework



Source: own construct

Matthews and Ross (2010:13) stated that the research design should not be dependent on whether a scholar chooses qualitative or quantitative method to do their research, but to make sure that method they select should look to address the research question of the current study. According to Devlin (2006:42) the researcher has to make sure that he/she collects data which when analysed appropriately will be able to answer the research question.

1.6.1 Target population

According to Welman and Kruger (2002: 46), when conducting a study, the researcher collects data from his/her selected subjects to solve a problem. The target population of this study will be all the employee who are involved in projects of the selected company.

1.6.2 Sampling and sample size

A sample is a group of respondent's representative of the population understudy from which a portion can be extracted for the study. The sample in this study is the project practitioners involved regularly in operation and project execution processes working with a leader (Blumberg, 2008:501). Stratified random sampling will be the method used to select respondents that will assist with the completion of the questionnaire. According to Welman, Kruger and Mitchell (2008:173) 20% or more of a representative is adequate for generalisation in a survey. Jowah (2015:77) posits that the larger the sample the less the margins of error, the researcher have opted to increase the sample size to a minimum of 30% to allow for improved accuracy. The sample size will be 100 IT project practitioners.

1.6.3 Data collection

Leedy and Ormrod (2005:89) explained that primary data is original data that is collected from the source first hand, and this data is collected for a specific purpose in mind. This data is closest to the truth than any other data that is collected; it is the most valid form of data, most informative to the researcher. The primary data will be supplemented by secondary data which is derived from secondary sources that had already undertaken a study similar to the current study. A properly designed questionnaire and face-to-face Interviews to explain how the questionnaire must be completed will be used as tools to gather the data required in this study from respondents who are randomly selected. Jowah (2011: 149) posit that a questionnaire is a tool or instrument which consist of a set of questions used to collect or gather information from a selected target population for the purpose of doing research to understand a phenomenon. The questionnaire is designed to be simple and easy to understand, this will assist the researcher in collecting the data from the respondents for the purpose of answering this papers research question.

1.6.4 Data analysis

SPSS (Statistical Package for Social Science software) will be the tool used to categorize, edit, code and analyse all the data collected using a well-constructed questionnaire. The tool is chosen for the analysis of the data collected from respondents as it makes it easy to convert data into graphs, charts and other formats that makes it easy to interpret and store for later use. Content analysis is chosen as the tool used to analyse open ended questions that were asked from the project managers and project team in the distributed questionnaire.

1.7 ETHICAL CONSIDERATION

According to Dawson (2002:146), when a study is undertaken, many participants in the study are willing to disclose a lot of personal information, thus the researcher should ensure that the information disclosed to him is treated with confidentiality. The researcher has an obligation of making sure that all the participants' information is treated with highest confidentiality so as to preserve human dignity. During the collection of the data for the study, all respondents were asked not to write anything that would reveal their identity. This was done to meet the one of ethical requirements of research, as their confidentiality and anonymity were guaranteed. All the respondents were informed of what the study is about and were not forced to participate in the study. They gave their consent to participate in the study voluntarily.

1.8 CHAPTER SUMMARY

Meredith, Shafer and Sutton (2007:49) postulate that for a person to be regarded as an effective leader they must have the ability to guide and direct teams or individuals to a particular direction. The project leader should competent enough in order to successfully execute projects. Leaders should be characterised by having a shared vision, be a good communicator, integrity, have enthusiasm, empathy, should have a problem-solving, team-building skills, be composed under pressure, and have the ability to trust others. According to Baccarini (1999: 25-32) for projects to be successful, project managers should be able to manage their projects to meet the triple constrains (time, cost, quality).

There is no leader without the people (followers) following them. Today followers have a kind of leaders of preference, someone who is able to develop them, guide them to the right path, and motivate them when they lose hope (Ahmad, Abbas, Latif, Rasheed, 2014: 11-25). An effective leader must be competent in the environment they are working in. Wei (2009: 89) leaders with effective leadership skills are very important and are of good use to any organisation, they are regarded as a very useful resource in the organisation quest to accomplish set company goals.

1.9 CHAPTER CLASSIFICATION

Chapter 1: the introduction of the study with background information on literature reviewed as well as setting out the problem statement, research question and research methodologies to be used.

Chapter 2: Background literature on leadership competence that discuss skills that a competent leader should have

Chapter 3: Detailed overview of Transformational and Transactional leadership styles, their critics, as well as how they compare to each other.

Chapter 4: Research Methodology

Chapter 5: Presentation and discussion of results

Chapter 6: Findings, conclusion and recommendations

CHAPTER 2:

PROJECT MANAGEMENT BODY OF KNOWLEDGE - TEN KNOWLEDGE AREAS

2. 1 INTRODUCTION

CHAOS Manifesto 2013 reported that only 39% of IT projects are delivered on time, on budget and according to specifications and functions in the year 2012 (Karaman & Kurt, 2015: 572-579). This reason prompted organisations and project managers to try to utilize project management methodologies that would increase the chances of project success, projects finishing on time, on constraints, and according to clients specified features. These methodologies were Project Management methodologies and application development methodologies according to (Chin and Spowage, 2010: 1-9). Chin and Spowage (2010: 1-9) classified these methodologies into different groups in accordance with the dimension of explicitness: Sector specific methodology; Project specific methodology; Individual methodology; Best practices, standards and guidelines and Organisation specific customized methodology. Karaman & Kurt (2015: 572-579) stated that the PMBOK, PRINCE2 and the Association for Project Managers Body of Knowledge (APMBOK) were inside the Best practices, standards and guidelines group.

International organisations such as Project Management Institute (PMI) have created best practises, as a result of efforts to demonstrate the area of knowledge required for competent project management (Meredith and Mantel, 2012: 114). These best practices are independent of Sectors and organisations they are applied to; they can be applied to any project undertaken by an organisation in any sector. The main focus of this chapter is to zoom in into PMBOK as the hard leadership competence. The previous chapter mentioned PMBOK in passing and did not dwell much on it, this chapter will divulge more information about this phenomenon. Cleland & Ireland (2006:4-5) mentioned that for the good 10 to 15 years the professional project management associations have been involved in the extensive studying and publishing of PMBOK material. The PMI association have outlined 10 knowledge areas of PMBOK on its PMBOK fifth edition. These associations are always engaged in research and development programmes to check whether the PMBOK standards are adhered too in practice during project execution.

2.2 BACKGROUD OF PROJECT MANAGEMENT

Jowah (2013:1-344) stated that in the beginning project management was solely based on tools and techniques such as the (CPM) - Resource smoothing and Critical Path Method, (PERT) - Programme Evaluation and Review Technique, (WBS) - Work Breakdown Structure. As organisations are more and more relying on projects for their survival, new techniques of managing

projects had to be introduced, that would deal with the new challenges of project management. According to Hodgson (2002:803-820) scholar publications, seasoned researchers and other research corporations brought new thoughts to the body of knowledge. The PMI and the APM which are the key players in the project management sphere have developed a curriculum for their standards. PMI which was founded in 1969 formed the PMBOK – Project Management Body of Knowledge in 1976.

The APM was in a view that the PMBOK which was introduced by the PMI did not address all the requirement of the project professional and decided to develop their Body of knowledge which is mainly accepted in Europe. The PMI rates the success of a project using the triple constraints of a project (time, cost, scope), while the APM association uses a different approach to measure the success of project, it focuses more on the behavioural aspects and includes the context of project management, general management, commercial and technological factors (Jowah, 2013:139:344).

2.2.1 Project management knowledge areas

The PMI took the large field of project management and broke it down into 10 more manageable parts, which it refers to as 10 project management knowledge areas in its PMBOK 5th edition. The PMBOK 5th edition has 47 project management processes which are organised into these ten knowledge Areas. Figure 2.2 below, shows a graphical representation of the 10 knowledge areas as found in the PMBOK guide (2013).

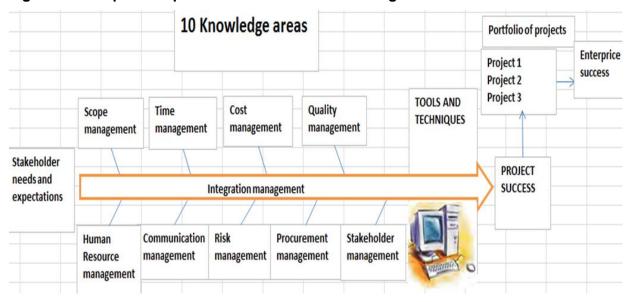


Figure 2.2: Graphical representation of the 10 knowledge areas

Source: own construct, adapted from PMBOK guide (2013: 5-481).

a) Project Integration Management

Project integration management holds the project together; this is the knowledge area where the development of the project charter, project management plans take place. This knowledge area is found on five phases of the project – Initiation, Planning, Execution, Monitoring and Controlling, and the closing phase. Figure 2.1 below is a graphical representation of the five phases that projects go though from start to finish.

Controlling & Monitoring

Planning

Closing

Executing

Figure 2.1: Graphical representation of the five phases of the project

Source: researchers own construct

Jowah (2013: 1-344) posits that project integration management is there to ensure that various activities of a project are coordinated in order to achieve project objectives. The project management processes found under this knowledge area are as follows:

- Develop Project charter Project charter defines the scope, objectives of the project, and all the stakeholders of the project.
- Develop Project Management Plan This is a formal document which gets to be approved by the stakeholders, it defines the way projects are executed, how projects are monitored and controlled
- Direct and Manage Project work it is in this process that the work defined in the project management plan get to be actually performed, and also the approved changes are implemented in order to achieve project objectives
- **Monitor and Control Project work** The project progress is tracked, reviewed and regulated in the process in order to meet project performance objectives.
- **Perform Integrated Change Control** Attending to all change requests; approving and managing changes to deliverables, document all the changes.
- Close Project In this process everyone agrees that the project had been completed
 according to specifications. This gives assurance that the work of the project has been
 completed.

b) Project Scope Management

Project Scope Management contains processes which ensure that the project contains all the work that is required to complete the project successfully according to the client specifications. It is in this knowledge area that scope planning, definition, verification, and scope change control is done. The use of a Scope definition document states exactly what the client expects the project to deliver in specific, tangible and measurable terms. A poorly defined scope will lead the project to failure, (Cho and Gibson Jr., 2001:115-125) also agrees with this view by stating in their research that poorly defined project scope is recognised by project practitioners as the leading cause of project failure. The project management processes found under this knowledge area are as follows:

- Plan Scope Management these are all the processes used to ensure that the project has all the tasks needed to complete the project, work that is out of scope is excluded
- Collect Requirements stakeholder needs and requirements are determined, documented and managed in order to meet project objectives
- Define Scope This involves establishing and documenting what the project specific goals
 are, what the project aims to deliver, what are its features, functions, tasks, deadlines and
 the total cost of the project.
- Create a Work Breakdown Structure In this process, project deliverable and project work are subdivided into smaller, more manageable tasks
- Validate Scope completed project deliverables get to be formally accepted.
- Control Scope product scope and the status of the project and also the management of changes to the scope baseline are monitored.

c) Project Time Management

A project is defined as a temporary endeavour which is carefully planned, undertaken to achieve a particular aim, it has a start date and an end date. Project Time management deals with the projects activity duration estimates, the definition of activities, their sequencing. In a nutshell Project Time Management encompasses processes that are required to manage the time to complete the project. The project management processes found under this knowledge area are as follows:

- Plan Schedule Management this process ensures that proper planning is in place to
 ensure that projects complete in their stipulated times. In this process the project schedule is
 developed, managed, executed and controlled.
- Define Activities actions that will be performed to achieve project deliverables are identified and documented.
- Sequence Activities relationships among project activities are identified and documented.

- Estimate Activity Resources Estimation are done to determine the quantities of material, the human resource and supplies that will be needed in order to perform or complete an activity.
- Estimate Activity Durations estimation is done to determine the number of work periods required to finish individual activities using estimated resources.
- Develop Schedule project schedule model is created by analysing activity sequences, duration of activities, resources required to work on activities, and schedule constraints.
- **Control Schedule** project progress is updated by monitoring the status of project activities and changes to the schedule baseline are managed to achieve the plan.

d) Project Cost Management

Project Cost Management comprises of processes involved in resource management, budgeting, financing, controlling of costs so that the project undertaken must be completed with the approved allocated budget. According to Gray & Larson (2008:131) project costs can be put into three categories, namely: Project overhead costs, direct costs, and general administration costs. Direct costs can be defined as costs for acquiring labour for the project, equipment which will be used and other costs that will be incurred that are fixed over period of time while working on a particular task. Project overhead cost can be defined as those cost that are incurred when securing a resource, example would be a salary of a software developer in a software development project, these costs can be directly pinpointed to the project. General administration costs are costs incurred during the day to day operation of the project. These would be office supplies, utility bills, rent and others. The project management processes found under this knowledge area are as follows:

- Plan Cost Management policies and procedures are setup for the purpose of planning, expending, managing and controlling the costs of a project
- **Estimate Costs** this is a process of estimating how much monetary resource is required to complete all the project activities
- **Determine Budget** total amount of monetary resource allocated to achieve a particular goal or project objective in a specified time.
- Control Costs status of the project is monitored in order to update project costs and to also manage cost baseline changes

e) Project Quality Management

Gitlow, Oppernheim, Oppenheim and Levine (2005:18) defined project quality as the ability of a product or service to perform satisfactorily to the clients' needs and is suitable for its intended purpose after it had been developed. Project quality management comprises of quality control and

quality assurance. Project quality management is carried out to ensure that project requirements are met and validated. The project management processes found under this knowledge area are as follows:

- Plan Quality Management in this project management process, the quality of the requirements together with the standards of the project and its deliverables are identified
- Perform Quality Assurance quality requirements and quality control measurements results are audited to ensure the use of appropriate quality standards and operational definitions
- Control Quality this project management process involves observation techniques and
 activities used to evaluate whether the product or service being produced meets the quality
 requirements that were setup to be met by the product.

f) Project Human Resource Management

Project human resource management comprises of processes involved in team organising, team acquisition and team development (Jowah, 2013: 1-344). The project team members are assigned roles and responsibilities for completing the project. These members have different skill sets needed for the completion of the project; they can be part-time or full-time on the project. Involving the project team members during decision making in the project will increase and strengthen their commitment to the project

- Plan Human Resource Management In this process, the required skills, reporting relationships, the roles and responsibilities of each team member are identified and documented. The staff management plan is also created
- Acquire Project Team acquisition of the project team necessary to complete project activities and also confirming the availability of human resource.
- **Develop Project Team** process of developing the project team competencies and skills, improving team members internal and external interactions, and optimizing overall team environment in order to enhance the performance of a project.
- Manage Project Team monitoring how each team member is performing, providing feedback to the team, resolving issues affecting the team, optimizing project performance by managing team changes.

g) Project Communication Management

It is said that Project Managers spend 90% of their time communicating with the team members and other stakeholders. According to Shenhar et al. (2007:5) Project communications management entails timely and appropriate planning, the collection and distribution of project information, the

creation, storage and retrieval of information; the management, control, monitoring and disposition of information of the project. The project management processes found under this knowledge area are as follows:

- Plan Communications Management After determining what the stakeholder information needs and requirements will be, an appropriate approach and plan for project communication is developed to address those needs
- Manage Communications the communication management plan is in place to be used as a guide in the process of collecting, creating, storing, retrieving, and distributing project information
- Control Communications to make sure that the information needs of all the stakeholders
 are met, the process of monitoring and controlling communications is used throughout the
 life cycle of a project.

h) Project Risk Management

Kutsch and Hall (2009:72-81) defines risk as an uncertain project related event or condition, that is occurs will affect negatively or positively the objectives of a project. Risk is a big topic in project management. IT projects have been identified as one of the project that have more risk than others, this is attributed by the fact that technology is ever changing, you might start a project with a main objective in mind, but by the time you finish technology would have changed to a point that the project outcomes are no longer relevant due to technology change. Project risk management encompasses processes for identify risk, developing responses to risk, analysing the risk, and controlling the responses to risk. The main objective of project risk management is to lower the chances of the risk affecting the project negatively, and increase the chances that the project is impacted positively. It is claimed that project risk management enables project managers manage the risk thereby minimizing the negative effects on the outcome of the project (Kutsch and Hall 2009:72-81). The project management processes found under this knowledge area are as follows:

- Plan Risk Management this process continues throughout the life of a project. There are
 continued attempts to identify new risks, plan for new risks that are identified, assess risks,
 trigger conditions and contingency plans get to be monitored.
- Identify Risks All the risks that may positively or negatively affect the project are identified and documented.
- Perform Qualitative Risk Analysis prioritization of risks for further analysis is done by
 assessing the probability of the risk occurring and the impact it will have on the project when
 it occurs.
- Perform Quantitative Risk Analysis when the risks are identified, their effect on the project objectives is numerically analysed

- Plan Risk Responses in this process, actions and options that enhance opportunities and lower chances of threats to project objectives are developed.
- Control Risks this process involves continued efforts aimed at identifying risks, analysing
 them, and responding to those identified risks. Risk response plans get to be implemented,
 risks which were identified are tracked, new risks are identified and last but not least, risk
 process effectiveness is evaluated, this happens throughout the life of a project.

i) Project Procurement Management

Some projects will need good and/or services from outside vendors and suppliers in order for them to be completed. Project procurement management involves creation of long/short term good/bad relationships with the outside vendors and suppliers that would be providing or supplying your project with goods and services for the project to complete. According to Fourier (2009:626) to ensure that all transactions are carried out openly, and an audit trail exist, an effective procurement system required that has well-articulated policies. When there is an effective procurement policy in place, it will ensure that contracts are awarded to those suppliers that offer best value for money (Bovis, 2007:11). The project management processes found under this knowledge area are as follows:

- Plan Procurement Management this process involves the identification of best sellers for
 the product or service needed in the project, project procurement decisions are documented.
 In a nutshell this document describes how product and services will be procured, and what
 approach will be used to manage vendors who provide those products or services.
- Conduct Procurements this involves getting responses from the sellers of service or product, selecting best seller, which will the one which is regarded as offering good value for money, and awarding contracts to those sellers.
- **Control Procurements** this involves the management of the procurements relationships with the vendors, monitor contract performance that exist with vendors.
- Close Procurements Procurement of service or product is complete. All procurement should be closed, whether they are complete or terminated for which ever reason.

j) Project Stakeholder Management

Project stakeholder management deal with the identification of all the stakeholders of the project, the stakeholders may affect or be affected by the outcomes of the project. After all these stakeholders have been identified, they have to be analysed in order to have a clear understanding of each and every stakeholder expectation from the project. When the stakeholders have been analysed and their influence on the project is known, strategies are put in place to effectively engage with all the stakeholders. The project management processes found under this knowledge area are as follows:

- Identify Stakeholders this process is one of the most important processes in the field of
 project management, it involves the identification of people, groups or organisations that
 might affect the outcomes of a project or be affected by it.
- Plan Stakeholder Management to effectively engage with all the stakeholder of the project base on their needs, interest, and their influence, appropriate management strategies are developed.
- Manage Stakeholder Engagement this process involves working with the stakeholders, communicating with them to better understand and meet their needs and expectations, issues get to be attended to as they occur.
- Control Stakeholder Engagement the monitoring of the entire project, make sure there
 are good stakeholder relationships, continuously adjusting the strategies that are used for
 stakeholder engagements. Figure 2.3 below, shows an analysis of project stakeholders.
 Stakeholder analysis is a tool used for gathering information about stakeholders, to better
 understand their interests in the project and also to assess what influence do they have on
 decision making process (Brugha and Varvasovszky, 2000:239-246).

High Keep satisfied - Meet their needs Engage closely and influence actively - Key players Engage and consult on interest area Engage and consult regularly Influence/power of stakeholders These are key players, focus efforts on this Try to increase level of interest Aim to move to the right box group. Involve in decision making bodies Least important Show consideration Inform via general communication Make use of interest through involvement in low Aim to move to the right box Keep informed and consult on interest area Potential support High Low Interest of stakeholders

Figure 2.3: Stakeholder Analysis

Source: own construct

The figure above shows what actions should be taken when engaging with the stakeholders

- High power, high interest stakeholder: They should be fully engaged, and greatest efforts should be taken to satisfy them.
- High power, low interest stakeholder: work hard to keep them satisfied, don't give them too much details because they easily loose interest.
- Low power, high interest stakeholders: make sure they are properly informed, engage them on major issues. These stakeholders can be very helpful with the detail of the project.

• Low power, low interest stakeholder: monitor these stakeholder, but don't bore them with too much information.

2.2.2 Comparison between PMBOK and PRINCE 2

Karaman and Kurt (2015: 572-579) posits that PMBOK and PRINCE2 are two of the most widely used project methodologies in the whole wild world. In project management sphere, these project management methodologies are used to as guidelines for successful management of organisational projects. Table 2.1 below, shows the high level comparison between PMBOK and PRINCE2 methodologies.

Table 2.1: High Level comparison: PMBOK vs. PRINCE2

FEAUTURE LIST	PMBOK	PRINCE2
Processes and Activities	There are 5 process groups	Comprises of 7 processes
	and 47 Activities	and 35 activities
Main focus	Main focus is put on	Focuses mainly on Products
	customer requirements	Business Case
Comprehensive or Practical	It is regarded as a	Regarded as a Practical which
	comprehensive method	focusses mainly on critical areas
Project Board role	The Board suggests the	The Board is required to
	role a project sponsor should	provide oversight of the project
	play	
Knowledge areas vs. Themes	Has 10 Knowledge Areas	Has 7 Themes and 7 Principles
Techniques	Technique for each	Only covers techniques
	process is covered	which are PRINCE2 specific

Source: own construct, information adapted from Karaman and Kurt (2015:572-579)

PMBOK has 10 knowledge areas, these knowledge areas are regarded as the building blocks of PMBOK, and they are defined as the activities and terms, the complete set of concept that makes up the field of project management. On the other hand, PRINCE2 uses 7 Themes which it defines as the project management aspects that must be continually addressed. PRINCE2 is not a complex application to understand, it is user friendly, project practitioners of any background can easily adapt to it.

There are 47 processes grouped under 5 process groups in the PMBOK methodology, these are process act as guidelines for project practitioners and must be followed thoroughly for them to yield

exceptional results. PRINCE2 has 7 processes; these processes are defined as activities designed in structured way to accomplish a specified objective. The table below show the PMBOK coverage of PRINC2 process and vice versa. Table 2.2 below, shows the comparison between PMBOK and PRINCE2 processes

Table 2.2: Comparing processes.

PRINCE2 Processes	PMBOK Coverage	PMBOK Processes	PRINCE2 Coverage
Starting Up Project	Partly covered by Initiating process group + Human Resource Management Knowledge Area	Initiating	Starting up Project
Directing a Project	-	Planning	Initiating a Project+ Starting up Project (partly)
Initiating a Project	Planning + Initiating (Partly)	Executing	Controlling a Stage + Managing Product Delivery (partly)
Controlling a Stage	Executing + Monitoring and Controlling	Monitoring and Controlling	Controlling a Stage and Directing a Project (monitor and control activities)
Managing product delivery	Partly covered by Executing	Closing	Managing a stage boundary
Managing a stage boundary	Closing process group	-	Closing a project
Closing a project		-	-1

Source: Singh and Lano (2014: 107-122)

The table above shows the mapping of processes of two methodologies, it can be clearly seen in the table that each methodology has some kind of superiority over the other when it comes to scope and activity details.

2.3 CHAPTER SUMMARY

When PMBOK is used in project management, it requires the use of all five process groups in every project. The use of these process groups vary according to each project's risk and complexity (PMBOK, 2013). These process groups serve as guide to the project manager when applying skills and project management knowledge on projects. According to PMBOK (2013), knowledge areas are formed by grouping the project management processes by their area of specialization. These knowledge areas define what a project manager need to know for them to successfully run projects. Process groups detail what the project manager needs to do.

CHAPTER 3:

TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP STYLES

3. 1 INTRODUCTION

According to Naidu and Van der Walt (2005: 1-10) leadership have become central to the success or failure of organisations, and the main reason for studying leadership is to determine the most effective leadership style (Engelbrecht, 2002: 589-606). Densten (2003: 400-418) stated that effective leadership is important in all organisations if they are to survive. What is leadership, someone might ask. Schreuder et al., (2011: 585-595) stated that in the past decades there have been proposed definitions of what leadership is. Most of these definitions concluded that leadership is a process, which entails influence over people being led, it is said to occur within group settings and involves shared vision and goals.

One of the definition is by Bunmi (2007:45-73) who defines leadership as a social influence process in which the leader seeks the voluntary participation of subordinates in an effort to reach organization goals. According to Hernandez et al., (2011: 1165-1185) a lot of effort have been put into research to try to evaluate the theoretical models of leadership that have been deployed, which explorer whether leadership relates to innate characteristics, actions or behaviours of a leader. Lewin et al., (1939: 271-299) stated that leaders use a particular leadership style or a combination of leadership styles when working with the project team in a project. Goleman (2000: 143) listed six leadership styles which are said to be linked to the leaders' effectiveness; the study also stated that these styles are based on aspects of emotional intelligence, and can impact the organisation in a positive or negative way. Table 3.1 below, show six leadership styles and explains what each leadership style in detail.

Table 3.1: Six leadership styles

Leadership style	Explanation
Affiliative	Promotes good relationships and communication within the group.
	 Interested in the personal welfare of her/his team members, and
	spend time on teambuilding.
	Have high-level of trust in their team members and give them great
	flexibility in how they do their jobs.
	Gives positive feedback frequently, yet may be uncomfortable
	giving negative feedback and may try to avoid difficult confrontations.

Coaching	Leader is concerned with supporting the efforts of others on the
J	team and developing their skills.
	Leader provides on-going performance feedback and sees
	mistakes and underperformance as learning opportunities.
	Delegate work for the purposes of development.
Commonding	They help team members to identify their strengths, weaknesses. A leader provides also religiously and our sets of a rest of fellow.
Commanding	A leader provides clear direction and expects others to follow. Provides a social set from the second and expects others to follow.
	Requires no input from team members when making decisions
	They don't want to listen to any ideas from the team members,
	and that makes the members to be demotivated and lose enthusiasm.
	Do not hesitate to confront team members when they are
	underperforming, will also reward those who excel in their duties.
Democratic	Leaders encourage participation and exchange of ideas from the
	team regarding the direction the team should take and what
	actions they should prioritise.
	When complex problems arise, they illicit ideas from the team
	attentively and builds consensus.
	Team members may sometimes feel that the leader needs to
	decide more and facilitate less
Pacesetting	Leader sets high performance standards for themselves, leads by
	example and focuses on achieving results.
	Expect team members to be competent in their roles.
	If a member's performance lags, leader reassigns the job to a
	member considered to be more competent.
Authoritative	Leader provides a clear direction and takes the team forward with
	shared goals.
	Leader motivates team members by making it clear to them how
	their work fits into a larger vision for the organisation and why what
	they do matters.
	Promotes commitment to the task and allow team members the
	freedom to innovate and experiment.
	They are particularly effective when a team or service has run into
	problems.
	vist adopted from Colomon (2000:142)

Source: own construct, adapted from Goleman (2000:143).

The list of the above mentioned leadership styles is not exhaustive as there is more leadership styles not mentioned in this list. The current study main interest is on the Transformational and transactional

leadership styles and how they are used in project management. According to Cox (2001) there are two categories of leadership: Transformational and Transactional leaderships. Ruggieri (2009: 1017-1022) stated that these styles are generally accepted as embracing elements of the other styles. In a transformational leadership style the leader helps their followers to exceed their initial performance expectation by promoting changes to their personal interests, their values, and norms. When the followers perform exceptionally in an organization, it will help the organization perform in its respective industry (Aryee et al., 2012: 393–411).

Hoffman et al. (2011:779-796) stated that transformational leaders influence followers to rise above less expectations, requirements and targets for the long-lasting advantages of the entire group. Transactional leadership on the other hand, a leader pursues a cost-benefit economic exchange with followers; this exchange relationship between the transactional leader and their followers is based on a contract that involves positive reinforcement for a higher level of performance. Waldman, Bass, and Yammarino (1990: 381–394) attest to this by saying, in transactional leadership, followers are typically given rewards in exchange for achieving certain levels of performance. Figure 3.1 shows a graphical representation of both the Transformational and Transactional leadership style.

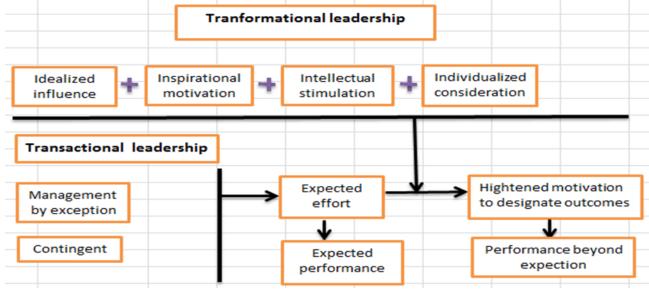


Figure 3.1: Graphical representation: Transformational and Transactional leaderships

Source: own construct, adapted from Erkutlu (2008: 708-726).

The figure above shows that when a leader is a transformation leader, they use the four components to motivate their followers. While a transactional leader makes a contract with their followers, where it is agreed on reward for efforts. Transactional leaders set rules that should be followed by their followers, and any deviation from these rules is met with corrective action.

3.2 BACKGROUND

3.2.1 Transformational leadership style

Duckett and Macfarlane (2003: 309-317) posits that the theory of transformational leadership was first coined by Burns in an attempt to differentiate it from those leaders that establish meaningful and motivational relationships with subordinates and followers from those that give out monetary benefits in exchange for work to be done in pre-approved work performance. Transformational leaders work hard to raise the consciousness of their followers by appealing to higher ideals and values such as liberty, justice, peace, and quality (Sarros and Santora, 2001: 383-394). Hacker and Roberts (2004:11) concur with this statement by stating that transformational leaders have the ability to create transformation by raising consciences and clarity to personal purpose, vision, and values in others. Jung and Sosik (2002: 313-336) said that transformational leadership predicts empowerment, cohesion, and perceived group effectiveness. Transformational leaders represent the most dynamic and successful form of leadership, which allows leaders to motivate and encourage participation from followers to archive beyond transaction requirements (Rubin, Munz and Brommer, 2005:845). In a transformational leadership style, leaders always strive to broaden and elevate the interests of their employees, they constantly generate awareness and acceptance of the purposes and mission of the group, and stir their followers to look beyond their own self-interest for the good of the group. The main object of transformational leadership is to build commitment to the organisational goals and then empower followers to accomplish those goals (Yukl, 1998: 166). Idealized influence, Inspirational motivation, Intellectual stimulation, and Individualized consideration are four primary components that constitute transformational leadership (Avolio et al., 1991: 9-16).

a) Idealized influence

These are charismatic actions of the leader that are centred on values, beliefs, and a sense of mission. Whether the leader is perceived as being confident and powerful, and whether the leader is viewed as focusing on higher-order ideals and ethics (Atonakis et al., 2003: 261-295). Bass & Riggio (2006:84) states that transformational leaders behave in ways that allow them to serve as role models for their followers, these leaders are admired, respected, and trusted. Idealized influence is a leadership behaviour that stimulates strong follower emotions and a clear identification with the leader (Bush, 2003:222). According to Rowold and Heinitz (2007: 121-133) Idealized influence from a leader functions to transform followers by creating changes in their goals, values, needs, and aspirations. Followers are happy to be identified with these leaders and want to emulate them; leaders are endowed by their followers as having extraordinary abilities, perseverance and determination.

b) Inspirational motivation

Refers to the ways leaders energize their followers by viewing the future with optimism, stressing ambitious goals, projecting an idealized vision, and communicating to followers that the vision is achievable (Atonakis et al., 2003: 261-295). Inspirational leadership is displayed when the leader envisions a desirable future, articulates how it can be reached, sets an example to be followed, sets high standards of performance, and shows determination and confidence (Erkutlu, 2008: 708-726). These leaders might inspirationally motivate their followers by using stories that inspires followers, and clearly communicate their message and subsequently their vision (Jogulu and Wood, 2008: 600-616).

c) Intellectual stimulation

Atonakis et al. (2003: 261-95) posit that intellectual stimulation refers to the leader's actions that appeal to followers' sense of logic and analysis by challenging followers to come up with creative solutions to problems. Intellectual stimulation is the stimulation and change in awareness of problems by followers, and also the stimulation and change in problem solving capacity of the followers. Leaders encourage their followers to come up with new solutions to problems, to question and rethink the own ideas in new ways, and ask for guidance in making decisions. Intellectual stimulation relies mainly on the personal capabilities of the leader (Yilmaz, 2008: 2293-2299). Asunakutlu (2007:73) lists intelligence, ability to build personal relationships with followers and technical expertise as examples of the personal capabilities of a leader.

d) Individualized consideration

Leader motivates their followers by looking at each individual needs, service those needs so as to get the desired organisational goals. Sarros, Gray, & Densten (2002: 1-26) stated that there is empirical evidence which indicates that individualized consideration is an important leadership behaviour in the workplace. Individualized consideration is important in motivating followers as they will feel that they are a valuable asset to the organization, which then leads to employee commitment. Leaders are aware of what the follower wishes are, what they need and what interests them in order to empower self-actualisation (Rafferty and Griffin, 2006: 37-61). According to Heathfield (2009: 28-55) transformational leaders work on improving and elevating their follower's capabilities through coaching, teaching, monitoring, positive criticism and feedback. Individualized consideration is afforded to individuals, whereby each follower is cared for in accordance to their individual need.

Transformational leadership prevails when there is a crisis in the organisation or social change in an environment (Erkutlu, 2008: 708-726). Transformational leaders energize their followers to persist in

unpredictable, stressful and difficult environments. According to Erkutlu (2008: 708-726) several authors believe that when the components of transformational leadership combine, the organisation will have followers that are highly influenced by their leader. Gellis (2001: 17-25) said that the four main elements of transformational leadership are interdependent; they must co-exist; and they are held to have an additive effect that yields performance beyond expectations. Several research studies have documented the power of transformational leadership in establishing value congruency and trust (Jung and Avolio, 2000: 949-964). Transformational leaders articulate the vision of an organisation in a clear and appealing manner, explains how to attain the vision, acts confidently and optimistically, expresses confidence in the followers, emphasizes values with symbolic actions, leads by example, and empowers followers to achieve the vision (Yukl, 2002: 79). Table 3.2 shows some of the characteristics of an effective transformational leader

Table 3.2: Some of the characteristics of a transformational leader

Clear sense of purpose, expressed simply	Love work
Value driven	Life-long learners
Strong role model	Identify themselves as change agents
High expectations	Enthusiastic about work
Persistent	Able to attract and inspire others
Self-knowing	Strategic
Perpetual desire for learning	Effective communicator
Risk-taking	Emotionally mature
Risk-sharing	Courageous
Visionary	A mentor
Unwilling to believe in failure	Able to deal with complexity, uncertainty ambiguity
Listens to all viewpoints to develop	considerate of the personal needs of
spirit of cooperation	employees

Source: Stone, Russell & Patterson (2003: 349-361)

As indicated in Table 3.2, transformational leaders are leaders that have a vision for the organisation. They develop their followers for the greater good of an organisation. They are always pushing for change in an organisation, always try new way of doing things in an organisation.

3.2.1.1 Impact of transformational leadership on employees

Ahmad et al. (2014: 11-25) posits that the theory of transformational leadership is very important in field of leadership and many studies show that there is positive relationship between transformational

leadership and other dependent variables like satisfaction, commitment, motivation and performance of the employees. A positive relationship exists between transformational leadership and employee creativity, which in turn lead to the success of the business. According to Bushra et al. (2011: 261-267) the philosophical approach to this style of leadership involves empowering employees and increasing their organizational commitment. The responsibility of transformational leaders is to create a vision that is simple to explain, clear steps of how it will be achieved, then empower employees and engage them to contribute to the organization successes. Transformational leaders ensure that their followers focus on collective goals rather than on individual goals, which results in higher degree of collaboration and cooperation among the members (Cavazotte, Moreno & Bernardo, 2013: 490-512).

3.2.1.2 People considered being successful transformational leaders

Our own, Dr. Nelson Mandela is considered to be one of the transformational leaders for the work he did by building what today we call the rainbow nation, uniting all the people of South Africa. Another leader who has done similar work to Nelson Mandela was Genghis Khan, according to (Yates, 2002) Genghis Khan managed to unite fiercely independent Mongol tribes to ultimately create one of the largest land empires ever seen during the late 12th and early 13th centuries. The last person we will mention in the study is Lee Iacocca, according to (Kelly, 2003); Lee Iacocca is accredited for saving Chrysler which was on the brink of bankruptcy by transforming the ideas of his subordinates and reshaped the culture of the organisation.

3.2.1.3 Pseudo Transformational leaders

Conger and Kanungo (1998: 80) defined pseudo-transformational leaders as leaders who want absolute obedience from their followers; they discourage doubting or debating of the vision by their subordinates. According to Bass and Steidlmeier (1999: 181-217) these leaders want to be personal idols to their follower, they are not interested in the collective ideals that might benefit their followers, they often fail to earn deep respect of their followers. Pseudo transformational leaders use the some of the elements of transformational leadership; they use these elements to advance their own agendas by controlling and dominating their subordinates. While transformational leaders attempt to nurture and influence followers' intellectual talent, pseudo transformational leaders attempt to block followers' intellectual abilities.

3.2.1.4 Criticism of Transformational leadership style

Hall, Johnson, Wysocki & Kepner (2002) stated that one of the main criticisms is that transformational leaders have a potential for the abuse of power. Yukl (1999: 285-305) noted that the underlying mechanism of leaders' influence at work in transformational leadership was unclear and that little empirical work existed examining the effect of transformational leadership on work groups, teams, or organizations. Criticism has also been raised on the grounds that transformational leadership style places more emphasis on 'vague and distal goals' which remains simply rhetoric. When articulating meaningful visions, transformational leaders fail to make these visions a tangible reality, as such employees cannot be effectively motivated if it remains rhetoric (Grant, 2012: 458-476). Grant (2012: 458-476) also states that conformity to the leader's view is implicitly encouraged by this approach in which it is assumed that, by definition, leaders are better equipped to know and to decide what is right and best than their followers. However, ultimately this over-reliance on, and subservience to the leader distorts their decision making, which is dangerous for both leaders and followers.

3.2.2 Servant leadership

There is another style that is similar to transformation leadership that the researcher felt compelled to mention for the benefit of the reader. This leadership style shares the same philosophy with transformational leadership, but there are minor differences outlined in this study. This leadership style is referred as Servant leadership. Robert K. Greenleaf (1904-1990) is credited with initiating the servant leadership concept among modern organizational theorists (Spears, 1995: 14). Farling et al. (1999: 49-72) posits that Servant leaders provide vision, gain credibility and trust from followers, and influence others. The table 3.3 below, shows differences and similarities between the components of Transformational and Servant leadership styles

Table 3.3: Similarities Transformation and Servant leadership

Transformational leadership	Servant leadership
Idealized Influence	Influence
Vision	Vision
Trust	Trust
Respect	Credibility and competence
Risk-sharing	 Delegation
Integrity	Honesty and integrity
Modeling	 Modeling and visibility
	Service
Inspirational motivation	Stewardship

Commitment to goalsCommunication	Communication
Enthusiasm	
Intellectual stimulation	Persuasion
Rationality	Pioneering
Problem solving	
Individualized consideration	Appreciation of others
Personal attention	Encouragement
 Mentoring 	Teaching
Listening	Listening
 Empowerment 	Empowerment

Source: Stone, Russell, and Patterson (2004: 349-361).

Stone, Russell, and Patterson (2004: 349-361) posits that transformational leadership and servant leadership emphasize the importance of appreciating and valuing people, listening, mentoring or teaching, and empowering followers. In fact, the theories are probably most similar in their emphasis upon individualized consideration and appreciation of followers. A major variation between transformational leadership and servant leadership is the focus of the leader. (Stone, Russell, and Patterson, 2004: 349-361). While transformational leaders and servant leaders both show concern for their followers, the overriding focus of the servant leader is upon service to their followers. The transformational leader has a greater concern for getting followers to engage in and support organizational objectives.

3.2.3 Transactional leadership style

For several decades more attention has been paid to transformational leadership and its links to positive organizational outcomes (Afshari and Gibson, 2016:507-519). It has been like that, because researchers had this assumption that transactional leadership is less considerate and less inspiring to develop organizational commitment amongst the followers. According Podsakoff et al. (1996:259-289) this neglect of research into transactional leadership is due to the consequence of transformational leadership popularity. Recent studies however, show that transactional leadership has also been positively linked to employees' discretionary behaviour, proactive behaviour, and organizational commitment (Breevaart et al., 2014: 138-157).

So how does transactional leadership work? Bass (1997:44) states that transactional leadership is focused on staff's basic and external demand, the relationship between leaders and subordinates are based on the contract. Transactional leadership relies more on trades between the leader and

follower, for which followers are compensated for meeting specific goals or performance criteria determined by the leader (Trottier, Van Wart, and Wang, 2008: 319-333). This relationship between a leader and their subordinates might be economical, political, and psychological in nature and they are exchanged in return for meeting predetermined performance (Ravichandran et al., 2007: 59-78). In the transactional leadership environment, subordinates are not expected to be innovative in their thinking, they are just expected to do a predetermined task in accordance with what the leader asked, and then they get compensated when they meet the leader's expectation.

Leaders and their followers must agree, accept and comply with the terms of the exchange of rewards for the worked performed; this exchange builds the foundation of the leader-follower relationship (Howell & Hall-Meranda, 1999:680-694). This leader-follower relationship only lasts as long as the exchange remains mutually satisfying for both the leader and the follower (Vishalli & Mohit, 2004:164-170). Transactional leaders use the bureaucratic authority and legitimate style to manage their followers. In order to fulfil his own self-interests, transactional leaders make sure that follower behave in a way that's preferable to them by using control strategies (Kanungo, 2001:56). The powers of these leaders come from the fact that they are able to provide rewards for the work done (Naidu & Van-de-Walt 2005: 1-10). Mehrotra (2005: 85) posits that transactional leadership relies on contingent reward and management by exception to influence subordinates. With contingent reward, employees are compensated according to what was agreed upon in the work terms of reference once they achieve their target and the leader is happy with the output. Contingent reward is based on a bargaining exchange system where the leader clarifies expectations to subordinates and they both agree on accomplishing organizational goals and the leader offers recognition and rewards to subordinates when goals are achieved (Limsila and Ogunlana, 2008: 164-184).

Obiwuru et al. (2011: 100 – 111) stated that management by exception is considered a corrective form of behaviour. Transactional leaders either intervene when problems arise and corrections are needed, or they continuously observe the followers' performance and interact when they sense that mistakes are going to take place (Emery and Barker, 2007:77-90). Transactional leader will only interact with his subordinate once something is wrong in the execution of the given task or when set standards are not met. Management by exception is classified into two types: **active management by exception and passive management by exception.** Geijsel (2003: 228-256) explained active management by exception as when leaders set standards and procedures then monitor and follow up on the subordinates' performance checking whether or not they are meeting the set standards. Leader only intervenes and takes appropriate actions once they see a breech in the set standards and procedures (Hughes and Avey, 2009: 540-562).

On passive management by exception, leaders only require their followers to carry out the essential documented steps necessary to achieve set objectives (Hsu and Mujtaba, 2007: 17-28). Leaders do not respond to problems systematically, they take a wait and see stance where problems are wait before taking necessary corrective action (Erkutlu, 2008: 708-726). Transactional leadership processes between leaders and their followers are considered to be more of management, rather than leadership (Ke and Wei, 2008: 208-218). It is the leader's prerogative to make sure roles and responsibilities are clearly defined to the followers, tasks to be done and their outcomes. This will help to ensure that the followers get necessary information to commit the necessary efforts to achieve the objectives (Nemanich and Keller, 2007: 49-68). Transactional leaders are aware of the needs and wants of their followers, and they detail how those wants and needs would be met once assigned tasks are completed successfully (Spendlove, 2007: 407-417).

Transactional leadership involves exchange between the leaders and their followers on agreed upon work standards and objectives (Martin and Marion, 2005: 140-151). Transactional leadership is about give-and-take relationship among leaders and followers. Followers get to be rewarded with remunerations, and/or promotions, and/or respect or status once leaders are satisfied that all their requirements had been met. Transactional leaders see the exchange relationship as a practice based on rewarding subordinates that perform satisfactory and punish those one that do not do well (Ruggieri 2009: 1017-1022).

3.2.3.1 Criticisms of transactional leadership

There is no bond between the leader and the follower for the communal pursuit of higher level of performance and follower development, the only relationship that exists relies on the concept of exchange (Brauckmann and Pashiardis, 2011: 11-32). Transactional leadership utilizes a one-size-fits-all universal approach to leadership theory that disregards situational and contextual factors related organizational challenges. Burns (1978:102) added that transactional leadership practices lead followers to short-term relationships of exchange with the leader and that these relationships tend toward shallow, temporary exchanges of gratification and often create resentments between the participants. There is a third style that transformational and transactional styles are always compared to when they are being discussed, and that style is laissez-fare leadership style, explained in the following passage.

Leaders who use Laissez-fare style will just assign responsibility to subordinates and not get involved after that, even if there are important issues, they stay away. Robbins (2007:68) describes this style as a leader who runs away from responsibilities and avoids making decisions. Laissez-fair are not involved in any work of the unit, they let their employees suffer alone. Leaders let group members decide amongst themselves, members make all the decisions (Mondy and Premeaux, 1995: 347).

The leader is unlikely to have any transaction with subordinates, and is likely to withdraw when differences occur. Figure 3.3 below depicts the model of the full range leadership suboptimal profile

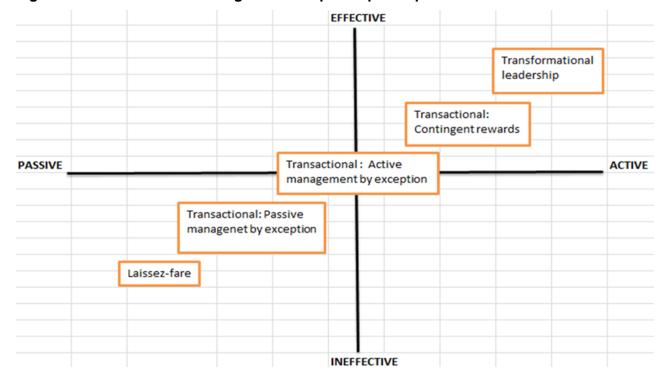


Figure 3.2: Model of the full range leadership suboptimal profile

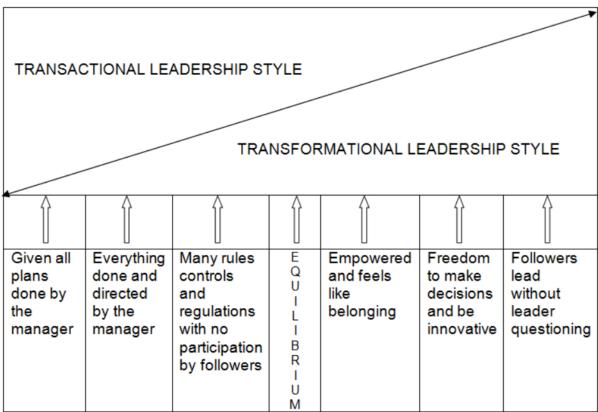
Source: adapted from (Bass and Riggio, 2006:42).

In figure 3.3, passive management by exception, leaders only put intervention mechanisms when they see that desired goals are not met by their followers. Active management by exception, leaders actively monitor how the followers perform their assigned duties, whether they are conforming to the set standards and without errors. Contingent rewards, leaders and followers get into a contract, where they are agreeing on what the follower must do to get rewards.

3.2.4 Differences between Transformational and Transactional leadership

The contrast between transactional and transformational leadership does not imply that these models are unrelated (Hater & Bass, 1988: 695—702). According to Odumeru and Ifeanyi (2013: 355-361) transactional and transformational leadership are different in concept and in practice. Transformational leadership significantly augments transactional leadership, resulting in higher levels of individual, group, and organizational performance (Lowe et al, 1996:385-425). Some researchers and academics believe that transactional leadership is a subset of transformational leadership (Weihrich et al, 2008). Burns (1978:10) stated that these two types of leadership are at the opposite ends of a continuum. Figure 3.4 below shows transformational and transactional leadership on the opposite end of the continuum.

Figure 3.4: Diagram depicting the opposite ends of the continuum



Source: Jowah (2013: 708-719)

The above diagram shows that under the transactional leadership style, everything from planning, making decisions is done by the manager and does not want any views of the follower. The only motivation that followers get is through monetary or other incentives from the leaders. Transactional leadership is all about exchanges between leaders and subordinates; in order to satisfy both the leaders and followers existing needs (Kythreotis, et al., 2010: 218-240). On the opposite end of the continuum we see transformational leadership. These leaders make sure they develop their followers for the good of the organisation and career development. Transformational leaders are interested in the well-being of their followers; they make sure they raise followers to become highly effective in what they do by transcending short term goals and appealing to their higher order needs (Judge & Piccolo, 2004:755-768).

Table 3.4: Comparison: transformational and transactional leadership

Transactional	Transformational
Leadership is responsive	Leadership is proactive
Works within the organisational culture	Works to change the organisational
	culture by implementing new ideas

Employees achieve objectives through rewards	Employees achieve objectives through higher ideal
and punishments set by leader	and moral values
Motivates followers by appealing to their own s	Motivates followers by encouraging them
interest	to put group interests first
Management-by-exception: maintain the status	Individualised consideration: Each behaviour
quo; stress correct actions to improve	is directed to each individual to express considerati
performance.	and support. Intellectual stimulation: Promote creat
	and innovative ideas to solve problems.

Source: Odumeru and Ifeanyi (2013: 355-361)

Table 3.4 above briefly describes the differences between the two leadership styles. In the table it is stated that transformational leaders are agent of change in an organisation and they encourage their followers to put the group interest first. Transactional leaders motivate followers by appealing to their self-interest. These leaders work within the organisational culture; they do not want to change the status quo.

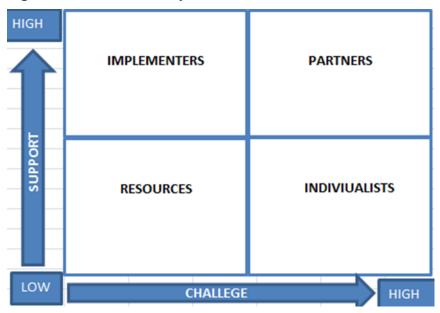
3.2.5 Followership

The study of the leadership would not be complete if nothing is mentioned about followers. What is followership? Maroosis (2008:99) defines followership as the follower's ability or willingness to follow a leader. There would be no good leaders without the support of their followers. Bateman (2011:70-72) posits that there are three elements that are regarded as important to leaders: competence, charisma, and personality. While good leadership and integrity is more important to the followers (Bateman, 2011:70-72). For the leader-follower relation to work, the follower must be willing to be led. If there is resistance on the follower's side, the leadership function might breakdown. Several characteristics of a good follower: Loyal, honest, reliable, have humanity, integrity, synergy (Barrette, 2010:30-33).

According to Townsend and Gebhardt (2003:18-21) there are two types of followership: active and passive followership. Empowerment of the decision making is regarded as the difference between these two types. In passive followership, followers just obey all the orders/instructions given by the leader, while active followers are granted power and involved in assisting their leaders in making final decisions. Kelley (1988:142-148) noted that while taking into consideration the active and passive attitudes, followership patterns can be from sheep, to yes-followers, to alienated-followers, to survivors, and to active followers. It is important for leaders to understand these basic followership styles as they reflect both positive and negative follower behaviour's. Cox (2010: 37-51) also listed

four types of followers: implementers, resources, individualist, and partners. Figure 3.5 below list the four types of followers.

Figure 3.5: Follower analysis



Source: own construct

Figure 3.5 above depicts the four types of followers, which are explained in the below passage.

- **Implementers:** They offers high support to their leaders, they are not willing to challenge the decisions taken by their leaders on how to achieve goals
- **Resources:** Offer low support to the leader, no will to challenge the leader on the decisions taken on their behalf they only do what is required in order to keep their jobs/positions.
- **Partners:** Offers high support to the leaders, challenge decisions taken by leaders, must be involved in all the decision making process have many responsibilities.
- **Individualists:** Give low support to their leaders, highly challenge their leaders on decisions taken that affect them have ideas but not willing to collaborate with the team.

Followers can also be grouped under two categories: intrapersonal and interpersonal factors. With the intrapersonal factor, followers develop their organisation by using their high intelligence. Interpersonal factor, followers do not only rely on their face-to-face encounters, but also on leveraging all available sources to improve the quality of work. Martin (2008: 8-11) listed 10 rules of followership. Table 3.5 below lists the ten rules of followership

Table 3.5: Ten rules of followership

Do your homework	Accept responsibility whenever it is offered
Do not blame your boss for an unpopular decision or policy	Fight with your boss if necessary
Make the decision and run it past the boss	Know the weaknesses as well as the strengths while plans are being implemented
Tell the truth and do not quibble	If you see a problem, fix it
Keep your boss informed	Put it more than an honest day's work

Source: researchers own construct, information adapted from Martin (2008: 8-11).

Leadership and followership go hand in hand, they are said to be two sides of one coin, each side connected to the other in a dynamic manner.

3.3 CHAPTER SUMMARY

Transformational leaders are driven by purpose. This type of leadership is not based on exchange for work that will be performed. They inspire their followers to work well in projects, they give them that sense that they are needed in the project environment. Transactional leadership is based on contracts that are reached between the manager and the employee. There can be no leaders without followers. Followers form an important part of the leadership spectrum. Followers are grouped into four type: the implementers, partners, individualists, and resources. These followers differ in the way they interact with their leaders. Implementers: highly support their leaders and do not challenge the decisions they make. Partners: highly support a leader, they should be involved in decision making. Individualists: they have low support for the leader, they have ideas but are not team oriented, they challenge the decisions taken by the leader. Quality of a leader is measured by looking at the successes or failures of an organisation they lead. Great leaders set goals for an organisation and achieve those goals within set times.

CHAPTER 4:

RESEARCH DESIGN AND RESEARCH METHODOLOGY

4.1 INTRODUCTION

The main purposed of this chapter is to identify the research methods that were used to obtain the study's results and conclusions. This chapter also focused on the target population, sample, sample size of the study. Methods used for data collection, system used to interpret the collected data, scope of the study and the study limitations, and last but not least, the assumptions that were made, are outline in this chapter. According to Jowah (2011: 6) research is a well-organised process which involves gathering scientific knowledge, this process is undertaken for the purpose of logically and systematically discovering new facts and/or verifying existing facts about a subject. Maylor & Blackmon, (2005: 5) stated that the research process follows this path:

- Problem identification.
- Determine the kind of information which will be needed to resolve the problem.
- Collecting that information and analysing it.
- Interpreting the information and its context.

Kumar (2005:14) postulates that for researchers to be objective and unbiased, they need to work according to the research process; work within the confines of a framework of set of philosophies, apply methods that have been tried and tested for validity and reliability. Jowah (2011:6) posits that research is classified into two categories: Qualitative and Quantitative. He goes on to describe qualitative research as subjective and explorative in its nature, focuses more on the human behaviour under study as viewed by the insider. Quantitative research on the other hand places much emphasis on the reliability and validity of the results.

4.2 RESEARCH DESIGN

Maylor & Blackmon, (2005: 5) describes research design as a detailed plan to conduct a study by means of translating one's research methodology into specific methods required in the study, these methods are techniques used in the research to collect and analyse data. According to Jowah (2011:55) research design is the structure of research which should be carried out for purposes of coming with an answer to the research question. Research design details how a researcher will work hand in hand with people participating in the research in order to reach a conclusion regarding the research problem (Welman et al., 2005:52). Panneerselvam (2004:12) stated that the research design is used a complete guideline for collecting data. Listed below are the core guidelines of the research design (Panneerselvam, 2004:12).

• Select the research approach

- Design the sampling plan
- Design the experiment
- Design the questionnaire

According to Maylor & Blackmon (2005:5) the research design involves the identification of a problem, the kind of information necessary to resolve the problem, used for collecting and analysing information, and also used for interpreting the information and its context. The research design comprises of issues such as decisions regarding the study purpose, the investigation type, the study setting, the level of data analyses and the extent of interference from the researcher (Sekaran, 2003:117-118). According to Singh and Nath (2007:160) a good research design makes available information that is concerned with the selection of the sample population's treatments and controls that should be imposed. This survey will use the combination of both qualitative and quantitative research design.

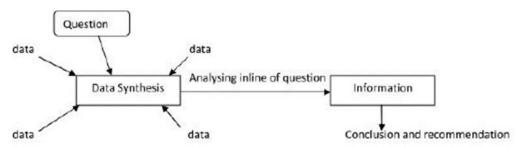
4.3 RESEARCH METHODOLOGY

Kumar (2005:14) outlined that in a research process researchers operate within the confines of a framework of set of philosophies, make use of methods that have been tried and tested for validity and reliability, and they try to be objective and unbiased in their research. The research process does not only focus on gathering information, it also seeks to answer unanswered questions and may also create things that do not exit currently. Research methods forms part of the many elements that exist within research methodology (Kumar 2008:5). Kothari (2004:10) summarized the importance of knowing and understanding research methodology or how research is conducted with the following points:

- It is of most importance to understand research methodology and techniques, if you are a person interested in pursuing a career in research because research methodology and techniques are every researcher's business. New researchers do better in research when they have sound training received from the knowledge of research methodology. People who want to pursue a career in research, they should get the knowledge and skill of how to use the research techniques, and should have a better understanding of the logic behind them.
- The researcher's knowledge of ways on how the research is conducted enables them to
 effectively evaluate and use the results of the research with confidence.
- The researcher's knowledge of the research methodology gives them power to make smart
 decisions with regards to problems they encounter in life. When a researcher has a greater
 knowledge of the process of conducting research, they may aspire to learn new intellectual
 tools which can help them to tackle the world problems objectively.
- Kumar (2008:5) defined research methodology as a systematic way of resolving research problems, and is understood to be the science of studying how research is done scientifically.

For research to be successfully carried out, it has to be understood in its spirit. According to Jowah (2011:3) research is a process, and therefore has to be carried out in a logical sequence from the beginning to the end (start to finish). Figure 4.1 depicts a research model that is adopted in this study

Figure 4.1: A research model



Source: Badke (2004:6)

According to Badke (2004:6) when conducting a research, you start with a question, you then
move on to collecting data, you synthesize the collected data, do data analysis in line with
the question to get information, based on the information you conclude and make
recommendations. The main purpose of research is to come up with answers to questions
through the application of scientific procedures (Kumar, 2008:2). Jowah (2011:3) posits that
the research purpose is to uncover the hidden truth which has not been uncovered so far.
Jowah (2011:61) outlined the differences between the research design and research
methodology listed in table 4.1

Table 4.1: Research design vs Research methodology

No	Research Design	Research Methodology
1	Strategic master plan	Operational or execution plan
2	Emphasizes the road to be walked	Emphasizes how the walking is done
3	Emphasis on what results are expected	Emphasis on tools or techniques for results
4	Guided by research problem/ question	Guided by the tasks and work packages
5	Focuses on rationality of research	Focuses on procedures and processes
6	Focuses on the "what should be done?"	Focuses on "how should it be done?"

Source: Jowah (2011:61).

Table 4.1 explains what the research design and research methodology are used for in research. Research design is used a strategic master plan when the study is conducted, while the research methodology is used a tool to execute the plan. The design focuses on what should be done, whilst the methodology details how it should be done.

4.4 RESEARCH STRATEGY

According to Walsh and Wigens (2003:69) the research strategy is considered the general approach when doing research investigation. Researchers use either the qualitative or quantitative methods or the mix of both methodologies in their studies as their main strategy to conduct research (Johnson and Onwuegbuzie, 2004:14-15). In the current study both these methods are used. Brannen (2005:4) posits that each researcher should adopt a particular research strategy in order for them to address a research question. In research different kinds of sampling are used (Wellman, et al., 2005:56), but for the purpose of the current study, the researcher will use the quantitative method. The quantitative study design is specific, structured well, tried and tested for reliability and validity, can be easily defined and recognised (Kumar 2011:103). The emphasis of quantitative research method is on the production of precise and generalizable statistical findings, and are commonly increasingly fitting to formulation of universal aims (Rubin and Babbie, 2011:67). Quantitative methods place its focus on measurements and amounts (similar and different, more or less, larger and smaller) of the qualities that are shown by individuals and the events studied by the researcher (Thomas, 2003:1).

4.5 TARGET POPULATION

The current study's target population is classified into two: the project practitioners, and the operations people that do work for projects and report to project managers. The assumption is that all the subordinates know how the projects are executed and how they should be treated by the project manager during project execution, and will therefore evaluate the project manager's leadership capabilities. This research is conducted in the Western Cape province, in one the companies, within the IT department.

Collis & Hussey (2009:62) stated that the target population refers to the entire group of individuals or objectives, that researchers are interested in researching and analysing to reach their conclusions. The population contains the fundamental elements that gives them a chance of being sampled to take part in the study (Churchill and Lacobucci, 2002:630). According to Sekaran (2003:265) a group of people, events or things that a researcher has some form of interest in researching is regarded a population of a study. Goddard and Melville (2007:34) are of the view that, it is not practical or possible to study the whole population. Bhattacharya (2006:81–82) agreed with the preceding statement by Goddard and Melville, but stated that the population is not completely defined, if it does not at least mention the following:

- Elements: People reporting to a project manager, and project managers themselves;
- Extent: The area of study and its limitations;
- Sampling unit: Professional involve in the IT environment;
- Time: period of research.

According to Stevens, et al., (2006:183), if a researcher improperly defines their population, can lead to the introduction of biasness in the study. A sample bias refers to the sample that is not a true representation of the study population, and therefore does not allow for the generalization of the sample results to the entire study population (Bryman & Bell, 2003:91). The target population of the current study is the project practitioners who are affected by the leadership of the IT project manager, these were randomly selected in the IT company in the Western Cape province.

4.6 POPULATION VALIDITY

Johnson and Christensen (2012:257) explains population validity as the ability to be able to generalise from the sample of people the study is focusing on, to the bigger population of people and across different sub populations inside the larger target population. Burns and Burns (2008: 427) stated that population validity was about whether the responses from the sample of participants were an accurate assessment of the population targeted by the study. Researchers should always ask the following question with regards to population validity: to what extent is the sample a true representation of the target population? (Burns et al., 2008:427). The main purpose of validity is to determine whether the study measures what the researcher wanted to measure (Golafshani, 2003:599). (Cooper and Schindler, 2008:318 - 320) concurs with the above statement by stating that, validity refers to the ability of a research instrument to measure what the researcher intends to measure with it. Validity is categorised into three major forms: construct validity, content validity, and criterion-related validity (Cooper and Schindler, 2008:318 - 320).

4.7 SAMPLE SELECTION AND METHODS OF SAMPLING

Sampling is a process used by researchers to identify, select, and separate a certain number of individuals or objects from which a survey of a study will be conducted (Jowah, 2011:83). According to Kothari (2004:153) a sample design is regarded as the well suited plan, used to obtain a sample from a sampling framework, and should be determined before data is collected. Panneerselvam (2004:12) is of a view that utmost care should be practised when selecting this sample design as it affects the time and cost to conduct the study. The sample selected for the study should be an accurate representation of the population so that results of the study can be generalized (Welman, Kruger and Mitchell, 2005: 57). Khan (2008:75) further defines the term sampling as the selection of part of a total sum with the aim of collecting complete information. According to Singh and Nath (2007:160) sampling is an essential technique of behavioural research, and without the use of sampling no research work can be undertaken.

Stratification is a techniques used to deal with specific individuals on specific levels of the organisation (De Vos, et al., 2005: 200). On the current study, stratification random sampling was

used in addressing all respondents that were covered in the IT company in the province of the Western Cape. The racial and gender imbalances necessitated the stratification of the population in an attempt to avoid the skewing of results towards one group of people. According to (Wamocha et al., 2012:105) the technique of stratifying random sampling involves the division of the population into homogeneous subgroups, and then extracting a simple sample from each group. Stratified random sampling technique is regarded as the most efficient and the best alternative when differentiated information is required regarding various levels within the population (Sekaran, 2003:282). Quantitative sampling has two types of errors: Random errors and Systematic errors (Gerrish and Lacey, 2010:148).

- ♣ Random errors: create less bias, as there is an assumption that this error is distributed evenly across the sampling frame and, therefore randomly derived frames remain inaccurate but a true representation of the study population. Any errors will tend to average out across the sample.
- ♣ Systematic errors: increased sample size does not reduce the error. Example: If the study seeks to recruit GPs from a list, but some of the GPs practices are routinely not added to that list, then the section of these GPs cannot be done, and this error is not regarded as a random error.

Stratified random sampling method has the potential to reduce the sampling errors, and this is regarded as one of the advantages of using method (Black, 2012:228). Another advantage of the stratified random sampling is that, a surveyor can select a sample which is a representation of various groups and patterns of characteristics in the desired portion (Fink, 2006:49). In the current study, stratification was only focused on IT projects in a company in the Western Cape. Secondly, only those who were affected by the IT project manager's leadership were participants in the study.

4.8 SAMPLE SIZE

With the size of the organisation in mind, and the research subject's availability, their qualification level and requirements, the nature of the industry and accessibility, and the financial constraints, a minimum of 100 IT project practitioners have been selected randomly as the sample for this study. A sample is regarded as the subset of the population of the study (Collis and Hussey, 2009:209). Sample design is known as the theoretical basis and practical means by which data is gathered so that attributes of a population can be deduced with known estimated errors (Bhattacharya, 2006:101). Putting into consideration factors such as the type of sample; sampling frame; the sample size required; the relevance of the population; and the costs is regarded as the best way of deciding on the sample size (Blumberg, 2008:237). In quantitative studies, the reduction of a sampling error can be attributed to the increase of the sample size (Klenke, 2008:10). A measure of the variability of differences, more often than not the standard deviation or variance is to be expected in the population when the sample size is calculated in a study (Gerrish and Lacey, 2010:147).

4.9 METHOD OF DATA COLLECTION

A well-structured questionnaire will be used as a tool to collect data for the study. This questionnaire has been approved by the supervisor who holds a PHD to check whether the questions in the questionnaire speaks to the research question, by the university statistician who also holds a PHD, and also has passed through ethics. The questions in the questionnaire have been made simple and unambiguous in order for respondents to answer with ease. The questionnaire was tested in the university IT department that is responsible for the execution of IT projects. The researcher will administer the questionnaire in a face-to-face manner, so that if respondents need any clarity, it can be made on the spot. According to Cooper & Schindler (2008:329) a questionnaire is the most common instrument of collecting data in business research. Market research uses a different process from the business research, in market research there is a questionnaire that respondents complete by themselves, and there is another instrument that is administered by the interviewer through face-to-face interviews or by telephone (Brace, 2008:2). The questionnaire for this study is divided into subsections: the demographics and soft skills.

Beri (2008:107) stated that in research we have two types of questionnaires: disguised and non-disguised. In a disguised structured questionnaire, the objective of the study is not disclosed by the researcher, whereas in the non-disguised questionnaire the objective of the study is clearly shown (Millers & Plant, 1977: 21-24). Panneerselvam (2004:14) outlines five steps followed when designing a questionnaire:

- * Research issues are identified and the set of hypothesis is finalized;
- For each research issue, set of question are formulated and then the decision about concept and format of each question is made;
- Decision about the wording of questions is made, depending on the type of questions.
- Arrangement of the questions in the questionnaire in appropriate sequence and also deciding on the format of the questionnaire;
- Questionnaire pre-tested
- Questionnaire reviewed for improvements.

The questionnaire has a structured section used to collect the data required by the study, and also a section where unstructured questions were placed to allow for the befits of quantitative questionnaire.

4.10 DATA ANALYSIS

SPSS (Software Program for Social Sciences) was used as a tool for analysing the collected data. The decision to use SPSS was motivated by the fact that SPSS is known to be effective in data

analysis and is also user friendly. According to Rubin and Babbie (2011:583) SPSS has the following benefits:

- Helps with data analysis;
- Assists with the compilation of appropriate tables;
- Examination of relationships among variables;
- Enable researchers to perform tests of statistical significance based on research questions.

To simplify things for the reader, data was converted into graphs and tables to make it easy to read the information and make comparisons where necessary. Welman, et al. (2005:211) posits that data analysis examines variables, what will be their effects, the relationships and patterns of involvement with the world. Data collected should be analysed to ensure that the research question has been addressed, and that the objectives of the study have been achieved.

4.11 VALIDITY AND RELIABILITY

Reliability simple means that different researchers will get the same findings should the study be repeated (Maylor and Blackmon, 2005:159). Reliability refers to the degree of consistency of the results (Quinton and Smallbone, 2006:130). (Cooper and Schindler, 2008:289) defines validity as the ability of a test to measure what it is purported to measure. According to Schultz and Whitney (2005:87) the validation process is not intended to show that the test itself is valid, but instead whether the conclusions and interferences that were reached on the bias of the test scores are valid. Golafshani (2003:599) posits that the purpose of validity is to ascertain whether the research accurately measures what it is purported to measure. Cooper and Schindler (2008:289) outlined the following three forms of validity:

- ♣ Construct validity: according to Angle (2007:9) this is the degree to which a research measures what it purports to measuring
- ♣ Content validity: this approach places its emphasis on expert's judgement on a particular domain that is being tested (Shultz and Whitney, 2005:87)
- ♣ Criterion-related validity: Landy and Conte (2010:83) stated that to directly support a hypothesis, you need to actually collect data and calculate a correlation coefficient. This is called criterion-related validity because, test scores are correlated with performance results.

4.12 SAMPLING BIAS

Macnee (2008:123) stated that bias happens when an unforeseen factor makes a change to the results in a way that would lead to wrong conclusions. When a sample is not a true representation of the study population it is referred to as sample bias, and sample bias does not allow for generalization of the sample results to the entire study population (Bryman and Bell, 2003:91).

Sullivan (2009:457) is of the view that bias happens when some members of the population have a better chance of being added to the sample than others. A sample that is found to be systematically different from the population is referred to as a bias sample (Johnson and Christensen, 2012:217). The stratified random sampling method was used by the researcher to avoid the chances of getting a sample bias. Collis and Hussey (2009:209) stated that every member of the populations stands a chance of being selected as a sample when the random sampling method is used. Powers and Knapp (2006:10) are of the view that using random samples instead of convenience samples is one way that researchers control their conscious or unconscious biases.

4.13 ETHICAL CONSIDERATION

Research ethics addresses the question of what ethically relevant issues that are caused by researchers' intervention will be expected to impact the people they research (Flick, 2011:215). According to Dawson (2002:146), when a study is undertaken, many participants in the study are willing to disclose a lot of personal information, thus the researcher should ensure that the information disclosed to him is treated with confidentiality. The researcher has an obligation of making sure that all the participants' information is treated with highest confidentiality so as to preserve human dignity. During the collection of the data for the study, all respondents were asked not to write anything that would reveal their identity. This was done to meet the one of ethical requirements of research, as their confidentiality and anonymity were guaranteed. All the respondents were informed of what the study is about and were not forced to participate in the study. They gave their consent to participate in the study voluntarily.

Welman et al., (2005:181) stated that there are three stages that ethical consideration should be observed: when releasing results that were obtained in the study, when recruiting participants for the study, and during intervention and measurement procedure to which they are subjected. According to Flick (2011: 216) there are eight principles of research, and they are listed below:

- 1. Have the ability to justify why it is necessary to do a research about their issue;
- 2. Be able to explain what the aim of the research is, and what circumstances will the participants be subjected to;
- 3. Should be able to explain in detail the methodological procedures in their projects;
- 4. Able to estimate whether their research acts will have ethical relevant positive or negative consequences for the participants;
- 5. Assess possible violations and damages arising from doing their project and be able to do so before they start the project;
- 6. Possible violations and damages identified should be assessed according to principle 5:
- 7. Should not make statements that are false about the usefulness of their research;
- 8. Current regulations of data protection should be respected;

Wellman et al., (2005:201) stated that more attention should be put on four ethical aspects of research, which are: informed consent; right of privacy; protection from harm; and involvement of the researcher.

4.14 ASSUMPTIONS MADE

- Respondents will not be reluctant to participate in the study.
- Respondents will answer questions in the questionnaire truthfully.
- ❖ All the questions asked will not offend anyone, and that they are clear and simple.
- ❖ There are no restrictions that will hinder the researcher in the company where data collection will be done.
- That the study will add more knowledge to the already existing knowledge about this topic.

4.15 SCOPE AND LIMITATION OF THE STUDY

- ❖ The research was done in one company, and cannot be generalized to all the companies in the Western Cape.
- ❖ The research was restricted to 100 respondents, and this may not be generalized to the entire country.

4.16 CHAPTER SUMMARY

In this chapter we looked at the research design and methodology that was used to conduct the study. The research design, theoretical aspect of research methodology; research strategy; study population; sampling methods; methods of data collection; and ethical consideration were all explained in greater detail.

CHAPTER 5:

DATA REPORTING, ANALYSIS AND INTERPRETATION OF THE RESEARCH RESULTS

5.1 INTRODUCTION

The sole aim of this chapter is to discuss and analyse the data that was collected from all the respondents that participated in the study. The main objective of this study was to identify leadership competencies that IT project managers must poses in order to run successful projects. A questionnaire was used to collect data from the respondents. All the people participating in the study were made aware that they are not forced to take part in the study, and that their identities will not be disclosed. The researcher has an obligation of making sure that all the participants' information is treated with highest confidentiality so as to preserve human dignity. The researcher followed all the ethical guidelines when conducting the study, and also taken in to account the general guidelines for ethical research stipulated by the Cape Peninsula University of Technology (www.cput.ac.za, 2015: 2).

5.2 REPORTING THE RESULTS

Primary and secondary data were used by the research to conduct the study and to answer the research question. SPSS (Software Program for Social Science) was used to categorise, analyse and edit the collected data, this program was chosen because of its user-friendliness and effectiveness in converting data into graphs, charts and tables when being analysed. The purpose of converting data to graphs, tables and charts is for making sure that the collected data was easy to read and get its meaning. The questionnaire used to collect data for the study is divided into 3 sections: Section A – Biography; Section B – closed ended question; Section C – open ended questions. 100 questionnaires were distributed, there was a participation rate of 93, and 7 respondents were reluctant in taking part in the study. Analysis was carried out on the 92 questionnaires that were completed by the respondents.

5.2.1 SECTION A: BIOGRAPHY

The questions in this section are general question in their nature, they are based on biographical information of the respondents. They were created for statistical purposes, to make sure that the sample is a true representation of the population.

Question 1: This question asked about the position each responded held in the organisation. This main aim of this question was to understand what the respondent was in relation to the project manager

Response; As stated in the above literature, it is expected that the project manager will have to interact with the project team members that occupy a certain position in an organisation. All respondents participated and gave their input. The data is interpreted in the pie chart in figure 5.1 below.



Figure 5.1: Position held by the respondents in the organisation

Source: own construct.

The chart show that 1% of the people who participated in the study occupy a manager's position in their work place, 4% selected the "other" option and explained what they were in the organisation, 10% of the respondents said they worked as supervisors in their organisation, 25% were part of the administration in the organisation, and a whopping 60% identified themselves as part of the technical staff in that organisations IT environment.

Question 3: Please select your age range.

This question was asked to try to understand the maturity of the organisation IT workforce.

Response; Matured respondents would most likely give solid information about IT projects, as they would have gained experience over the years. All respondents participated and gave their input. Table 5.1 represents the respondents age range

Table 5.1 Employees age

Age range	Percentages
<=20 years	0%
21 – 30 years	36.56%

31 – 40 years	61.29%
41 – 50 years	2.15%
50 years and above	0%

According to the collected data shown in the above table, there are no employees who are 20 years or below who are involved in the IT project execution in the organisation, there are 34 employees between the ages 21 - 30 years who are involved in IT projects – this equals to 36.56% of the people who took part in the study. Those who fall between the ages of 31 - 40 years were 57, which makes 61.29% of the respondents that participated. 2.15% constituted the percentage of respondents who fell between the ages of 41 - 50 years, this was made by two respondents. There were no employees who were 51 years and above who participated in the study.

Question 4: This question asked about the level of education for each respondent.

This question seeks to investigate whether the people who are involved in IT projects of the organisation had any form of formal qualification or they were just trained inside the company.

Response; Respondents with a formal education are expected to perform better than those without, as they would be understanding the concept of projects. All respondents participated and gave their input. Table 5.2 shows the respondents level of education.

Table 5.2: Level of education

Qualification	Number of people	Percentage
Senior certificate	1	1.08%
Diploma	65	69.89%
Degree	27	29.03%
Other	0	0%

Source: own construct

In the table above, we doing an analysis on the number of respondents that have a formal qualification of some sort. According to the data collected, 1 person stated that they hold a senior certificate, so that 1 person equals to 1.08% of the total respondents. 65 people said they hold a national diploma, and those 65 people make up 69.89% of the respondents of the study. Only 27 people which is equivalent to 29.03% have a degree as their formal qualification.

Question 6: This question asked how long the responded worked in IT project execution.

With this question, the researcher was trying to understand how long the respondents have been working in IT projects, the experience they have in IT projects.

Response; Respondents that have many years of experience working in IT projects are expected to give meaningful information with regards to the project manager's competencies. All respondents participated and gave their input. Figure 5.2 below shows the years that respondents have been involved in IT projects.

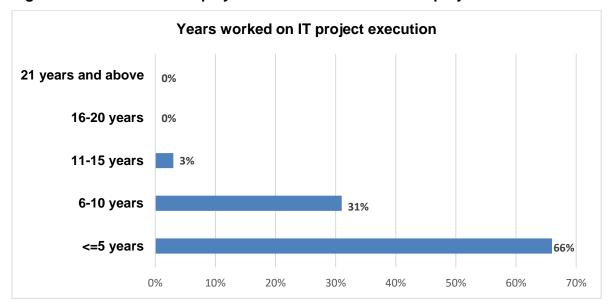


Figure 5.2: Years which employees have been involved in IT projects.

Source: own construct.

The chart above clearly shows that there was 61 (66%) number of the respondents who have less or equals to 5 years they have been involved in the execution of IT projects. 29 (31%) of the respondents have 6 to 10 years being involved in IT projects. There 3 (3%) respondents have 11-15 years being involved in IT projects, and there was no person who had more 15 years involved in these projects.

Question 7: This question asked how long the respondents worked for the organisation the study is focusing on. This question was asked to get a clear understanding of how long these employees have worked with the project manager/s the study is focusing on.

Response; Respondents who have been with the organisation for a long time, are assumed to have been working with the organisation project managers and therefore understand their competencies. All respondents participated and gave their input. Figure 5.3 gives a picture of how respondents have been with the organisation under study.

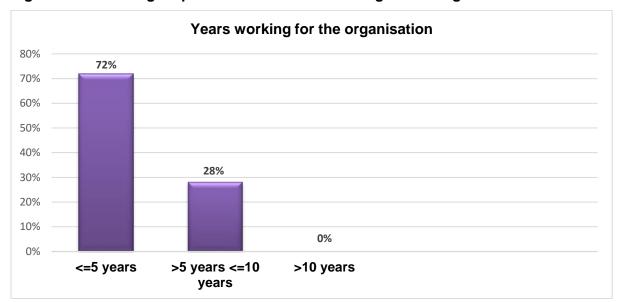


Figure 5.3: How long respondents have been working for the organisation.

According to the above chart, 67 (72%) respondents have been working in the organisation for less than or exactly 5 years. The other 26 (28%) respondents have worked in the organisation for more than 5 years but not exceeding 10, there were no respondents that participated in the study, who have worked for the organisation in IT projects for more 10 years.

Question 8: this question asked respondents how frequent they attended project meeting.

This question was intended to find out whether respondents get to participate in project meetings, where most of the project planning and decisions are made.

Response; In project meetings, views are shared are among the project team. So by attending these meetings respondents would get knowledge on a lot of things about projects. All respondents participated and gave their input.

This question had the following options: daily, weekly, monthly, as required, and never for the times they get to attend project meetings. All 93 (100%) respondents said they participate in project meetings as required.

Question 9: asked respondents about the structure of the organisation.

This question was asked in order to understand the company structure when projects are being executed.

The options respondents had to select from were:

Projectized structure: all the project team members report to the project manager alone, this reduces conflicts in making decisions. Since there is a single line of authority, communication is fast when information is relayed to the stakeholders. Due to excellent communication, urgency, milestones, and cooperation, the learning curve is more rapid for members who are new.

Matrix structure: This structure is the combination of projectized and functional structure. Project team report to both the project manager and functional manager. The functional is responsible for functional part of the project; they decide how the work is done and may distribute the project work among his subordinates. The project manager has authority over the administrative part of the project.

Functional structure: People are supervised by the functional managers only. All the decisions are made by the functional managers. People get to grouped by their area of specialization.

Response; To this question all the 93 (100%) respondents selected the matrix structure, they all stated that they have to report to two managers.

Question 10: this question asked respondents why they chose to work in IT projects.

In this question, the researcher was trying to find out why the respondents chose to work in that environment. The researcher was trying to ascertain whether the respondents had any love for the work they do or they just went to work in the environment because they were given the job by their friends.

Response; It has been proven that if someone is doing a job that they don't have love for, they are bound to badly perform.

I am qualified, given to me by a friend, liked the working hours, and other were all the options that respondents had to select from. From these options, all respondents selected the I am qualified option (100%).

5.2.2 SECTION B – COMPETENCIES FOR AN EFFECTIVE PROJECT LEADER

Section B uses the Likert scale; all the respondents were asked to answer by putting an X to each box that corresponds to each statement. The statements used in section were placed under main headings: Communication competency, Decision making competency, Leadership competency, and problem solving competency. The Likert scale of 1 - 5 was used to rate respondents' responses, with 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree. All the responses were plotted on a bar graph to easy the understanding of the information.

Communication competency

focused on how well project managers communicate with the project stakeholder. There were 6 statements under Communication Competency.

Statement 1: Unable to effectively communicate project objectives; the given statement was intended to measure how clear the project manager communicates the project objectives. Bad communication from the project manager would demotivate the project team, as they are not aware of the bigger picture of implementing the project

Response; I can be confirmed from the responses from the respondents that the project manager affectively communicates projects stakeholders. Figure 5.4 below shows reposes from the respondents.

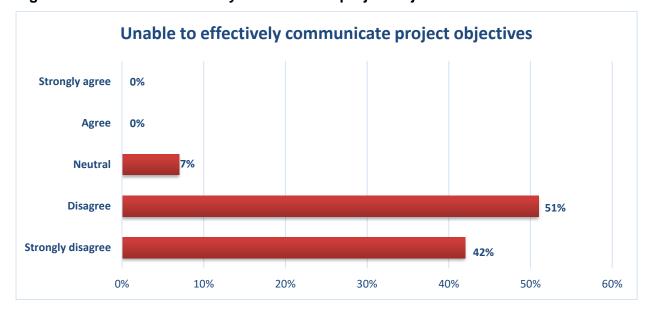


Figure 5.4: Unable to effectively communicate project objectives.

Source: own construct.

Figure 5.4 shows that 42% strongly disagreed with the statement that the project manager cannot effectively communicate project objectives. 51% also said the disagree with the statement. 7% didn't want to agree or disagree, and they decided to stay neutral. This large number of respondents who did not agree with the statement clearly shows that the project manager effectively communicates the project objectives to the project team members.

Statement 2: Communicates work progress to project stakeholders; this statement is intended to measure whether the project manager always informs the stakeholders about the progress of the project. Stakeholders are always interested in knowing about the project progress at all times.

Response; An effective project manager is expected to constantly update the project stakeholders about the progress of the project. This creates trust and good working relationship with the stakeholders. All respondents participated and gave their input. Figure 5.5 show all the responses from the participants.

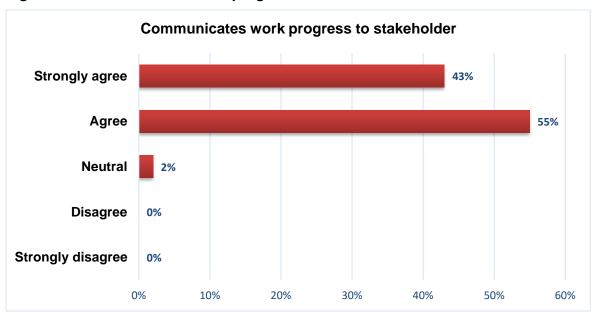


Figure 5.5: Communicates work progress to stakeholders.

Source: own construct

Figure 5.5 show that 55% of the respondents agreed that the project manager communicates the project progress to the stakeholders, another 43% strongly agreed with the statement, and the last 2% were neutral on this matter, they didn't want to say they agree nor disagree with the statement. There is no one from the participants who disagreed with the statement. From these results, we can establish that the project manager keeps the stakeholders up to date about the project progress.

Statement 3: Do not listen effectively to other team members; this statement was intended to ascertain whether the project manager do listen to the inputs from the project team or they are the types of leaders that do not take any advice/inputs from their subordinates.

Response; The more the project manager listens to the members of the team, new ideas and fast methods to solve problems. This would also lead to trust and a sense of belonging as the team members are able to give input in problem solving process. All respondents participated and gave their input. Figure 5.6 shows responses from the participants.

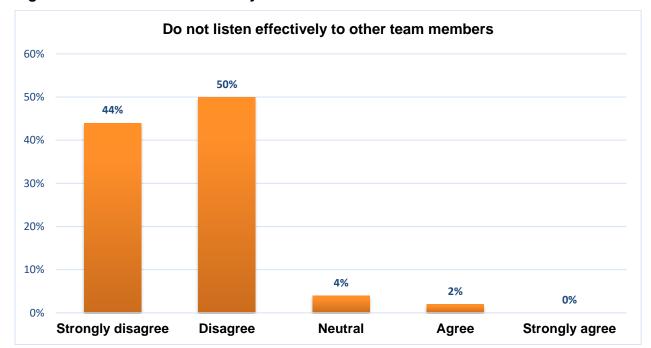


Figure 5.6: Do not listen effectively to other team members.

Figure 5.6 shows that 50% of the respondents disagreed with the statement which said, the project manager does not listen effectively to other team members. 44% strongly disagreed with the statement, 4% of the participants chose to be neutral in the matter, while the remaining 2% agreed with the statement. No one strongly agreed with the statement. Looking at these responses, we can clearly say that the project manager is seen as a leader who listens to the team members.

Statement 4: Forms up clear and concise written communication; this statement was intended to investigate whether the manager has a good written communication skill, where a manager writes clear, strait forward messages to all the stakeholders of the project.

Response; Effective project managers are expected to write clear and unambiguous communication to the project stakeholders, this ensures that everyone is clear of what is expected of them. All respondents participated and gave their input. Figure 5.7 shows responses from the participants.

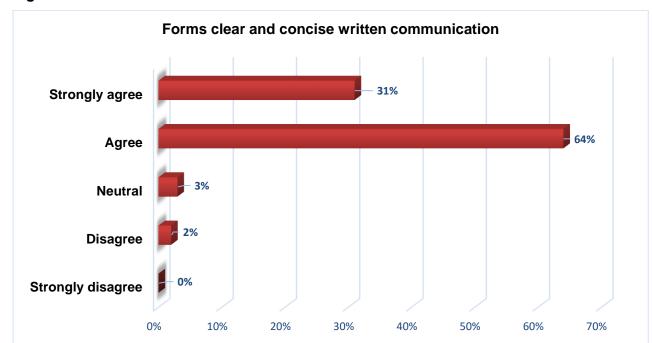


Figure 5.7: Forms clear and concise written communication.

According to figure 5.7, 64% of the respondents agreed with the statement which say that the manager form clear and concise written communication, 31% strongly agreed with the statement. 3% chose to be neutral while only 2% disagreed with the statement. Looking at the responses from the participants, we can surely state that the project manager is believed to be very clear and concise when using written communication to convey information to the team.

Statement 5: Able to distribute information by emails, memos, presentations, reports; the purpose of this statement was to find out whether the project manager effectively used the proper channels of disseminating information.

Response; Project managers are expected to know the proper channels to disseminate information to the stakeholders. They have to assess what information needs to be sent to which stakeholder, and what type of channel to use to send that information. All respondents participated and gave their input. Figure 5.8 below show responses from the participants.

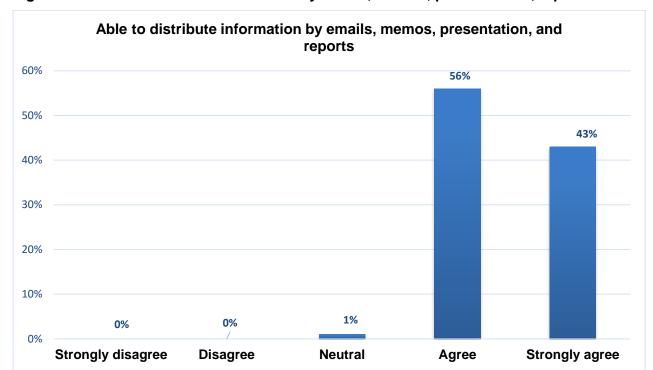


Figure 5.8: Able to distribute information by emails, memos, presentations, reports.

Figure 5.8 shows that 58% of the respondents said they agreed with the statement that the project manager is able to disseminate information via emails, memos, presentations and reports. 43% also strongly agreed with the statements. 1% remained neutral and none of the respondents disagreed with the statement. From this positive response from the participants, it's safe to say that the project manager is proficient in disseminating information.

Statement 6: Encourages transparency and the sharing of opinions; this statement was intended to evaluate whether the project manager encouraged the sharing of ideas amongst the project team members.

Response; Project managers are expected to advocate for the sharing of ideas within the project space. This sharing of ideas constitutes to the team building in projects. All respondents participated and gave their input. All the responses from the participants have been captured in figure 5.9 below.

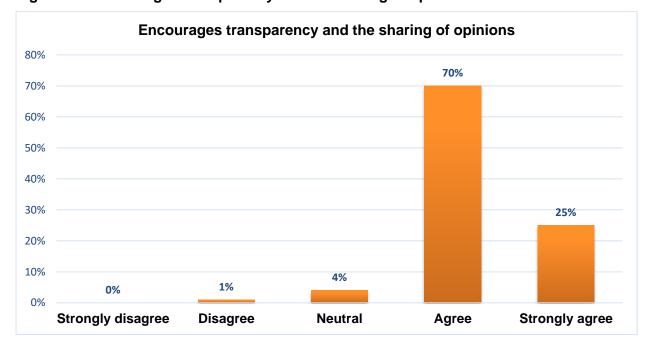


Figure 5.9: Encourages transparency and the sharing of opinions.

Figure 5.9 show that 70% of the respondents agreed to the statement that the manager encourages transparency and the sharing of opinions amongst team members. 25% strongly agreed with the statement. 4% stayed neutral, while 1% disagreed with the statement. From the responses we got, we can safely say that the project manager is for transparency and the sharing of ideas in the team.

Decision making competency,

this heading comprises of six statements under it, they are all intended to test whether the manager is able to make good decision for the project, whether they ask for input from the team before they take some of the decisions, whether they make sure they have all the relevant information before they make decisions.

Statement 7: Scrutinizes available information; this statement is intended to test whether the project manager examines, critically inspect the information available to them before they take decisions.

Response; Project managers are expected to examine carefully, inspect, and study all the information they have before making decisions. All respondents participated and gave their input. All the responses from the participants are displayed in figure 5.10 below.

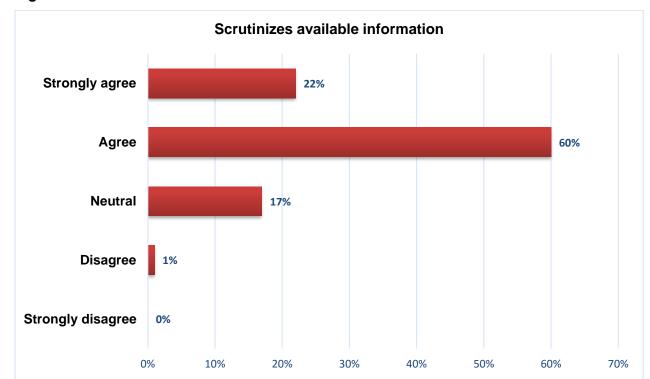


Figure 5.10: Scrutinizes available information.

In the chart in figure 5.10 above we can clear see that 60% of participants agreed to the statement that said project manager scrutinizes information. 22% strongly disagreed with the statement. 17% decided that they will stay neutral. Only 1% disagreed. Looking at the responses from figure 5.9 we can clearly see that the respondents favour their project manager.

Statement 8: Makes decisions based on relevant information; this statement is intended to test whether the project manager is able collect information related to a problem then make their decision based that information that is relevant to the problem they are trying to solve.

Response; It is expected of project managers to collected information related to the problem at hand, study that information, and then make decisions based that information. All respondents participated and gave their input. Responses from respondents are recorded in figure 5.11 below.

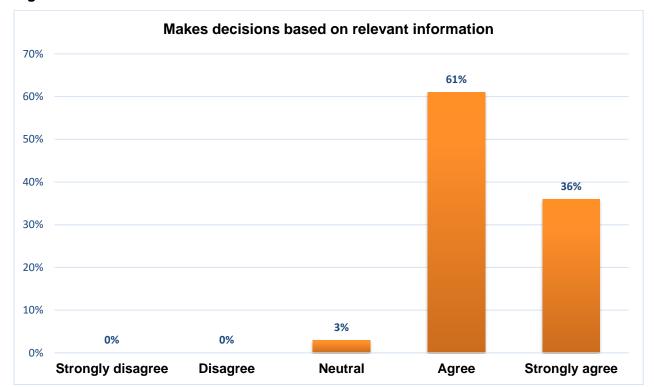


Figure 5.11: Makes decisions based on relevant information.

Figure 5.11 show that 61% of the participants agreed to the statement that the manager makes decisions based on relevant information. 36% strongly agreed with the statement. 3% remained neutral on the matter. None of the participants disagreed with this statement. The gathered information clearly show that participants agree that they have a manager that takes decisions based on relevant information.

Statement 9: Brings up sound decisions while representing integrity; this statement was intended to test whether the project manager makes good decisions whilst adhering to business ethics.

Response; Project managers should adhere to the organisation ethics while making any decision that affect the company. All respondents participated and gave their input. Figure 5.12 below captures all the responses from the study participants.

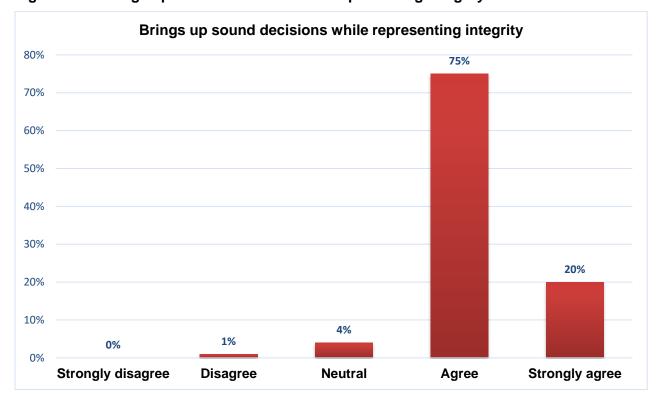


Figure 5.12: Brings up sound decisions while representing integrity.

Figure 5.12 shows that 75% of the participants agree with the statement that the manager brings up sound decision making while representing integrity. 20% of these participants strongly agreed with the statement. 4% remained neutral, while 1% disagreed. If these results are anything to go by, we can safely say that the majority of the participants are happy with the manager decision making skill.

Statement 10: Follows up on decision making process; this statement is intended on evaluating whether the manager follows up on decision they have taken in the project.

Response; It is expected of project managers to follow the decision making process, before they can reach any decision in a project. This will ensure that nothing is left undone before the final decision is made. All respondents participated and gave their input. Figure 5.13 captures all the responses from the participants.

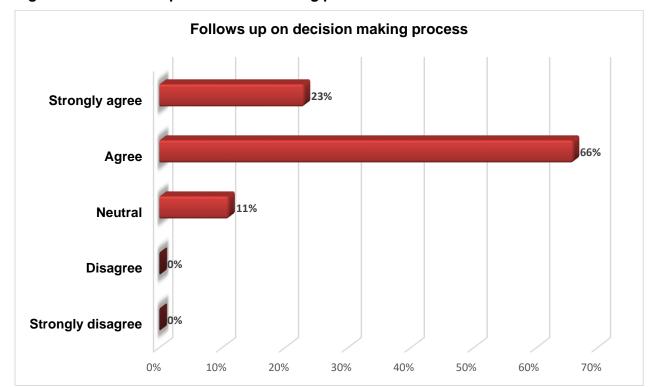


Figure 5.13: Follows up on decision making process.

According to figure 5.13, 66% of the participants said they agree with the statement that say the manager follows up on decision making process. 23% agreed with the statement. 11% remained neutral, and there were no participants who disagreed or strongly disagreed. A majority of participants are happy with the manager when it comes to him/her following on, on the decisions he/she made.

Statement 11: Use a rational process in making decisions; this statement was intended to evaluate whether the manager follows any steps when making a decision.

Response; It is expected that project managers follow a process when making a decision, the process starts with: problem definition, Identify the decision criteria, allocate weights to the criteria, look for alternatives, evaluate the alternatives, take the best alternative. All respondents participated and gave their input. Figure 5.14 captures the responses from the participants.

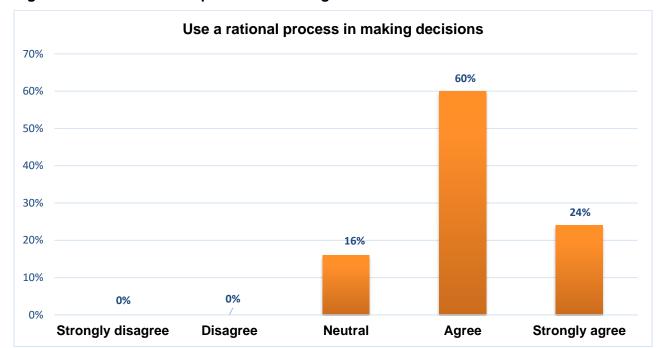


Figure 5.14: Use a rational process in making decisions.

Figure 5.14 show that 60% of the participants agreed with the statement which said managers use a rational process in making decisions. 24% strongly agreed with the statement. 16% remained neutral and there was no one who disagreed with the statement. Looking at these responses, it is clear that participants think their manager follow some form of a process when making decisions.

Statement 12: Seek input from relevant stakeholders to increase probability of success; this statement is intended to evaluate whether the project leader ask for any input from the project stakeholders when they are making decisions regarding the project.

Response; Project managers should consult the project stakeholders, before they arrive to a final decision in project. This increases the chances of project successes, as the saying goes "two heads are better than one. All respondents participated and gave their input. All the responses from the participants are captured in figure 5.15 below:

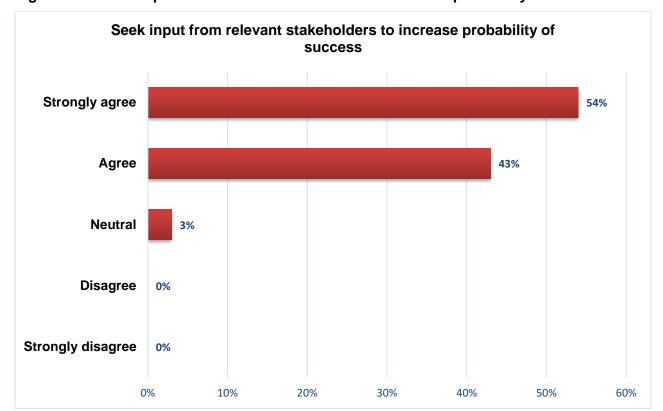


Figure 5.15: Seek input from relevant stakeholders to increase probability of success

Figure 5.15 show that 54% of the respondents strongly agreed with the statement that the project leader seeks input from relevant stakeholders to increase probability of success. 43% of the participants also agreed with the statement. 3% of the respondents remained neutral and none of the participants disagreed with the statement. In summary, it is evident that all the participants were agreeing with this statement.

Leadership competency

this heading comprises of seven statements under it, they are all intended to test whether the manager is able to provide good leadership in projects, whether they can give clear directions to the project team and all the stakeholders at large.

Statement 13: Does not inspire others to believe in the work they do; this statement is intended to test whether the project team find the project leader as a source of inspiration when they are executing projects, whether they get clear guidance and support when they work on projects.

Response; Project leaders are expected to inspire confidence in the project team, the are expected to guide the team members, give support where necessary, and instil confidence to the team. All

respondents participated and gave their input. Figure 5.16 captures all the responses from the participants.

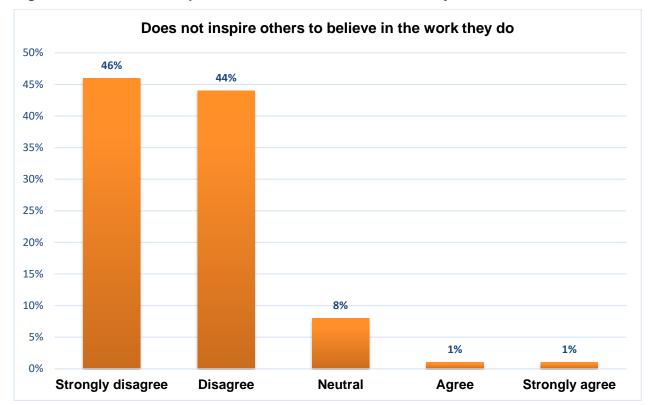


Figure 5.16: Does not inspire others to believe in the work they do

Source: own construct

Figure 5.16 shows that 46% of the participants strongly disagreed with the statement that said project leader does not inspire others to believe in the work they do. 44% of the participants disagreed with the statement. 8% remained neutral. 1% agreed and the last 1% strongly agreed. These results clearly show that the participants thought the project manager inspires them to do project work.

Statement 14: Shares responsibility for success; this statement was intended to evaluate whether the project manager ensures that everyone feels personally accountable for the future success of the organisation instead of telling the people what to do.

Response; Project managers are expected to create an environment where everything is shared amongst the team – this in turn creates an environment where everyone takes upon themselves to make the organisation succeed. All respondents participated and gave their input. Figure 5.17 captures all the responses from the participants.

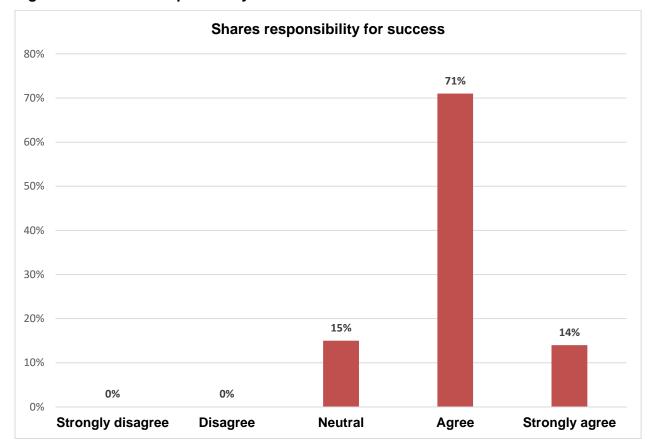


Figure 5.17: Shares responsibility for success.

Figure 5.17 shows that 14% of the respondents strongly agreed with that statement that the project manager shares responsibility for successes. 71% agreed with the statement while 15% remained neutral. Looking at the responses from the participants, we can clearly see that a large of participants believed that the project leader shared the responsibility for successes.

Statement 15: Does not provide vision for the project team; this statement is intended to test whether the project manager gives project participants a reason to participate. The project manager's vision eliminates confusion, gives clarity of the project purpose, unifies the project team, and inspires the team to do their best.

Response; It is expected of project leaders to create a vision for the project team, this vison should explain the process, how the process is supported by technology, and the new solution will benefit stakeholders. All respondents participated and gave their input. Figure 5.18 captures all the responses from the participants.

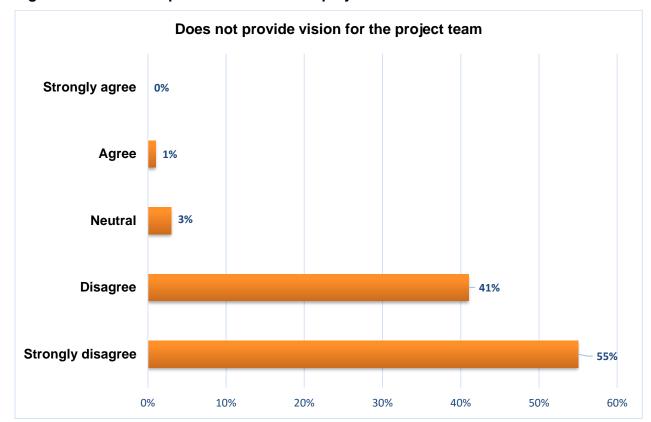


Figure 5.18: Does not provide vision for the project team.

Figure 5.18 show that 55% of the respondents strongly disagreed with the statement that the project manager does not provide vision for the project team. 41% also disagreed with this statement. 3% remained neutral while the last 1% agreed with the statement. Looking at these responses, we can see that a large number of respondents were against this statement.

Statement 16: Influence project team to work without being pressured; this statement is intended to test whether the project manager is able to use other influence strategies other than the pressure strategy to influence the team. Pressure strategies involve coercion or intimidation, in this strategy managers tell the team to do the work or face negative consequences of not doing the work.

Response; Project managers are expected to influence an environment where team members can exercise their duties, and share ideas without being constantly under pressure. All respondents participated and gave their input. Figure 5.19 captures all the responses from the participants.

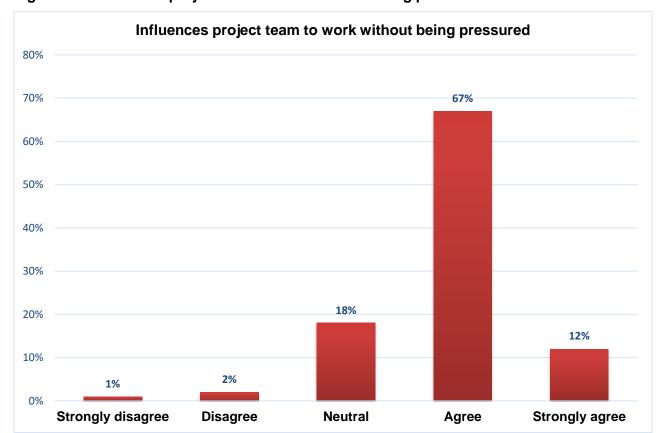


Figure 5.19: Influence project team to work without being pressured.

According to figure 5.19, 67% said they agree with the statement that said the project manager influences project team to work without being pressured. 12% said they strongly agreed with the statement. 18% remained neutral. 2% disagreed and 1% strongly disagreed. Looking at the responses, we can see that a large number of participants were in agreement with the statement.

Statement 17: Takes a lead in uncertain situations; this statement is intended to evaluate whether the project manager knows what to do in time of uncertainty in projects, listens to the project team when they give their inputs, engages project team when there is a change in the projects, and explain a new path that the project will be taking.

Response; When faced with an uncertain situation in a project, project managers are expected to consult with the teams to help them take advantage if it's an opportunity or resolve a problem. All respondents participated and gave their input. Figure 5.20 captures all the responses from the participants.

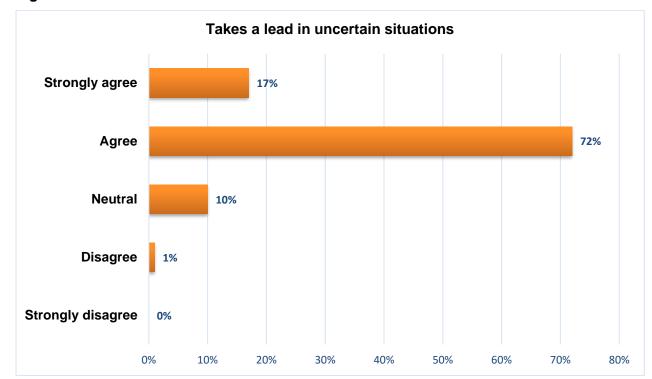


Figure 5.20: Takes a lead in uncertain situations.

Figure 5.20 show that 72% of the respondents agreed with the statement that the project manager takes a lead in uncertain situations. 17% strongly agreed with the statement. 10% remained neutral while 1% disagreed with the statement. Looking at the results from the respondents, we can safely say that a large number of respondents thought that the project manager takes a lead in uncertain situations.

Statement 18: Provides trust and reliability to the project team members; this statements is intended to evaluate whether the project manager is competent in the job they do; project team get to trust a project manager if competent enough to do the job; Project managers can build trust by make sure that they are empathetic to the project teams wants and needs. Honesty of the project manager will make them to be regarded by their project team as reliable and truthful.

Response; For mutual trust be present in projects, project managers are expected to create an environment where there is high integrity, good work ethics, and good team spirit. Figure 5.21 captures all the responses from the participants.

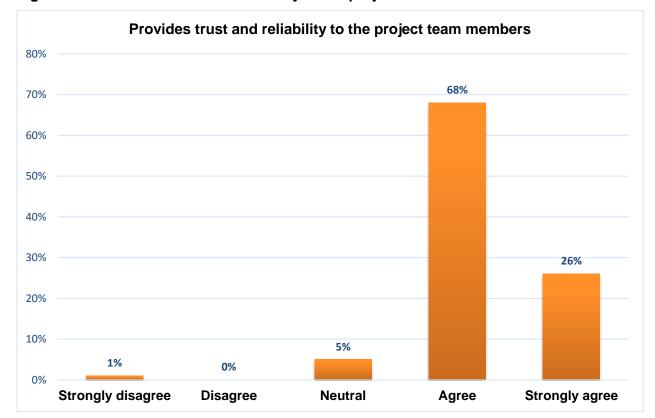


Figure 5.21: Provides trust and reliability to the project team members.

Figure 5.21 show that 68% of the respondents agreed that the project manager provides trust and reliability to the project team members. 26% of the participants strongly agreed with the statement. 5% remained neutral, while the last 1% strongly disagreed. These results clearly show that the respondents were in favour of the statement.

Statement 19: Do not delegate effectively to others; this statement is intended to evaluate whether the project manager trusts the project team enough to delegate to them some of his/her duties. Project managers should delegate duties in order to develop project team members.

Response; Project managers are expected to effectively delegate work to competent project team members. All respondents participated and gave their input. All the responses from the participants are captured in figure 5.22 below.

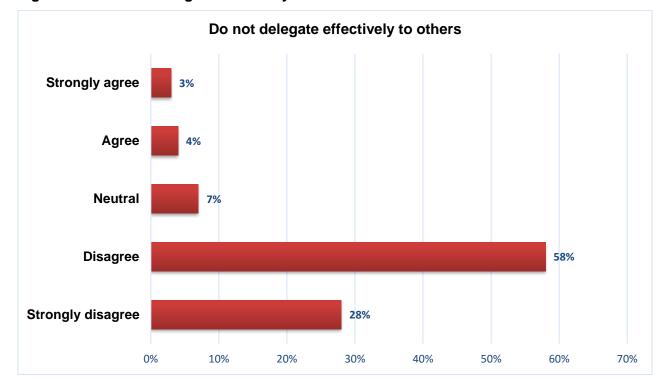


Figure 5.22: Do not delegate effectively to others.

Figure 5.22 shows that 58% of the participants have disagreed with the statement that the project manager does not delegate effectively to others. 28% of the participants strongly disagreed. 7% remained neutral. 4% had agreed with the statement and 3% strongly agreed. Looking at these responses, we can see that a large number of participants did not agree with the statement.

Problem solving competency,

This heading comprises of seven statements under it, they are all intended to evaluate whether the project manager has the ability to obstacle, issues and opportunities, and then come up with solutions and implement them.

Statement 20: Not able to identify a problem; this statement is intended to evaluate whether the project manager has the ability to identify what the issues are in the project, pay much attention closely to the problem area to form a detailed image of what is not right.

Response; It is expected of project manager to clearly identify a problem. Once a problem is clearly identified, the team will come up with solutions to that problem. All respondents participated and gave their input. Figure 5.23 captures all the responses from the participants.

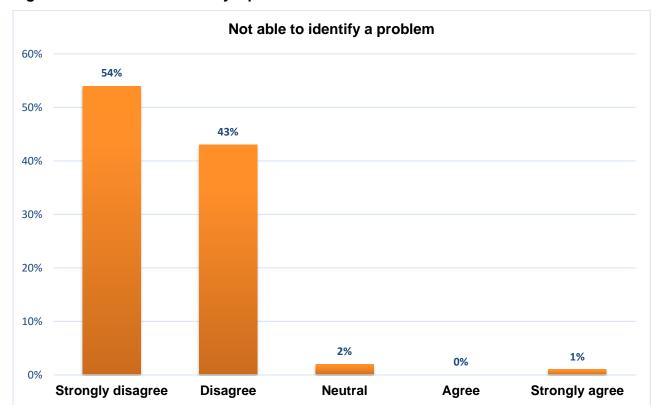


Figure 5.23: Not able to identify a problem.

According to the results in figure 5.23, 54% of the participants strongly disagreed with the statement that say the project manager is not able to identify a problem. 43% said the disagree. 2% remained neutral while the last 1% said they strongly agree with the statement. These responses show that a great number of participants did not agree with the statement.

Statement 21: Looks for best solutions when resolving problems; this statement seeks to evaluate whether the project manager after identifying the problem, whether they brainstorm solutions and use the most suitable solution to the problem after taking into consideration the time, money, staff, and resources that would work on the solution.

Response; Project leaders are expected to brain-storm solution to problem, then together with the team take the best solution to resolve the problem. All respondents participated and gave their input. Figure 5.24 captures all the responses from the participants.

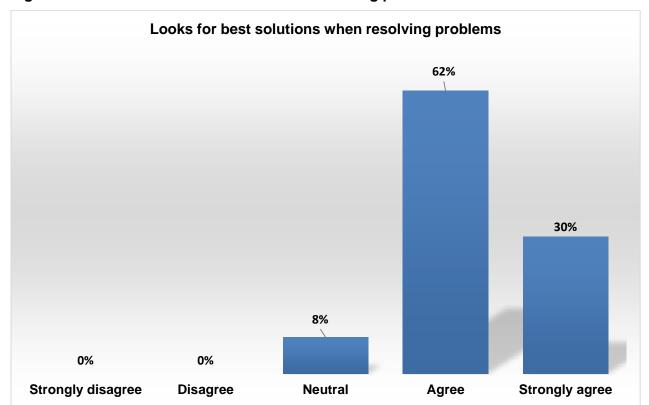


Figure 5.24: Looks for best solutions when resolving problems

Looking at the responses shown by figure 5.24, 62% of the participants said they agree with the statement that the project manager looks for best solutions when resolving problems. 30% of the participants strongly agreed. 8% remained neutral. None of the participants disagreed with the statement. These responses show that a huge number of participants were agreeing with the statement.

Statement 22: Exhibits creativity in problem solving; this statement is intended to evaluate whether the project manager employs innovative ways of problem solving in a project.

Response; It is expected of project managers to generate creative and innovative ways of solving an identified problem. All respondents participated and gave their input. Figure 5.25 captures all the responses from the participants.

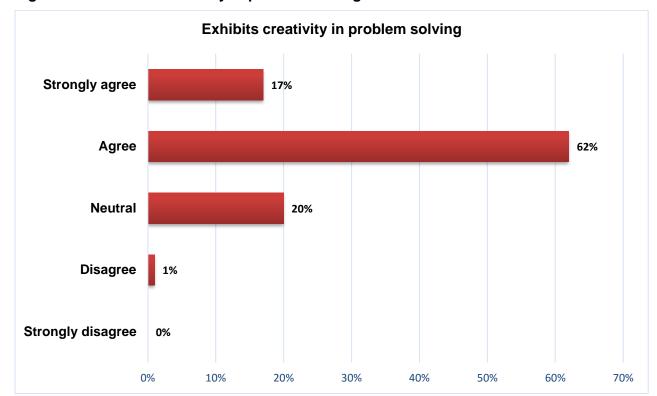


Figure 5.25: Exhibits creativity in problem solving.

Figure 5.25 shows that 62% of the participants agree with the statement that the project manager exhibits creativity in solving problems. 17% of these participants strongly agreed with this statement. 20% remained neutral, and the last remaining 1% said they disagree with the statement. Looking at these responses, it is evident that the participants agreed with the statement that the project manager exhibits creativity in problem solving.

Statement 23: Collects information related to the problem; this statement is intended to evaluate whether the project manager collects all the information which will aid in coming up with the solution for the problem at hand.

Response; It is expected of project managers to collect all the information that relates to the problem, this information will assist in coming up with a solution to the problem. All respondents participated and gave their input. Figure 5.26 captures all the responses form the participants.

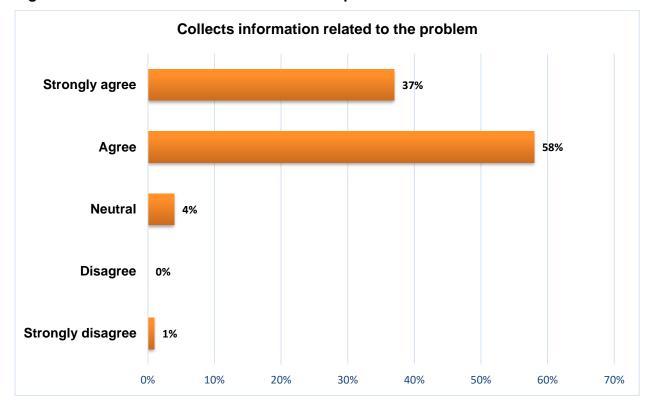


Figure 5.26: Collects information related to the problem.

Figure 5.26 show that 58% agreed with the statement that the project manager collect information related to the problem. 37% strongly agreed. 4% remained neutral while the last 1% said they strongly disagree with the statement. Looking at the responses from the participants, we can see that a large number of participants agreed that the project manager collect information related to the problem.

Statement 24: Do not engage the team members in trying to come up with a solution to the problem; this statement is intended to evaluate whether the project manager brainstorms with the project team to come up with solutions to a problem in a project. When you involve your team in making decision, your project team will feel valued and continue to want to work for the project manager.

Response; Project manager is expected to involve the project team when resolving problems of a project, brainstorming is regarded as a good practice when looking for solutions for a problem. All respondents participated and gave their input. Figure 5.27 captures all the responses from the participants.

Do not engage the team members in trying to come up with a solution to the problem

Strongly agree 1%

Agree 1%

Neutral 5%

Disagree 51%

Figure 5.27: Do not engage the team members in trying to come up with a solution to the problem.

0%

10%

Figure 5.27 shows that 51% of the respondents disagreed with the statement that say the project manager do not engage the team members in trying to come up with a solution to the problem. 42% strongly disagreed with this statement. 5% remained neutral. 1% said they agree and the remaining 1% strongly agreed with the statement. Looking at the responses from the participants, it is evident that a large number of participants did not agree with the statement.

30%

40%

50%

60%

20%

Statement 25: Responds quickly to arising problems; this statements is intended to evaluate whether the project manager responds quickly to problems instead of reacting. Responding involves reflection, thoughtfulness and consideration of all the factors that cause the problem, these responses should be well presented and carefully formulated.

Response; Project managers are expected to respond quickly to problems arising in a project, they have to evaluate all the factors that might be the cause of the problem, before then can respond. All respondents participated and gave their input. Figure 5.28 below captures all the responses from the participants.

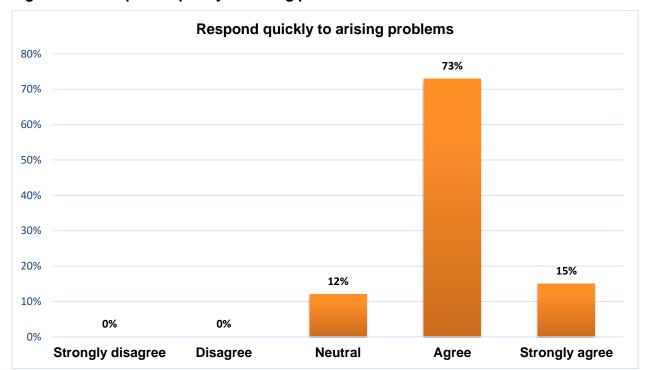


Figure 5.28: Responds quickly to arising problems.

Figure 5.28 shows that 73% of participants said they agree with the statement that the project manager responds quickly to arising problems. 15% of the participants said they strongly agree with the statement. 12% remained neutral and none of the participants disagreed with the statement. Looking at these results, it is clear that a large number of respondents are agreeing that the project manager responds quickly to arising problems.

Statement 26: Does not try to reach amicable solutions; this statement intends to evaluate whether the project manager makes attempts to reach solutions that are favourable to all the project stakeholders.

Response; Project managers are expected to listen to all project stakeholders point of view before taking a decision. All respondents participated and gave their input. figure 5.29 captures all the responses from the participants.

Does not try to reach amicable solutions 60% **53**% 50% 40% 33% 30% 20% 11% 10% 2% 1% 0% Strongly disagree Disagree **Neutral** Agree Strongly agree

Figure 5.29: Does not try to reach amicable solutions.

According to figure 5.29, 53% of the respondents said they disagree with the statement that says the project manager does not try to reach amicable solutions. 33% strongly disagreed with this statement. 11% remained neutral. 2% agreed that the project manager does not try to reach amicable solutions and 1% strongly agreed with the statement. Looking at these results, it is evident that the large number of participants disagreed with the statement.

5.2.3 SECTION C - OPEN ENDED QUESTIONS

This section comprises of open ended questions which were divided into two statements: (1) participants were asked to list things that project managers are doing well in projects for the project team to work efficiently. (2) participants to list things that project managers can change in order to be effective leaders. There is no pattern in which respondents had to follow in listing their responses.

List things that project managers are doing well in order for you to work efficiently

Five lines were reserved for the respondents to enter their responses. 98% of the participants did provide their responses, while 2% did not complete this section of the questionnaire. There was no way to categorise these responses because respondents wrote different things, but there were those that stood out and they are worth mentioning. Keeping the team together and motivated, detailed planning for the project, provide clear communication about goals, performance and expectation, gives necessary training to project team, meeting deadlines, perfect analysis of project scope, maintaining good communication with the stakeholders, setting realistic targets, allocation of

resources to tasks, inspires project team to do the work, delegates well, good time management skill, integrity, have empathy for project team, motivates the team, accountable, honest, sometimes seeks advice from the team before making decision, encourages innovative ways of solving a problem, gives feedback in time, provides support to the project team.

List things that project managers can change in-order for them to be effective project leaders.

Five lines were reserved again for this section for respondents to enter their responses. 87% did provide their responses, 13% did not complete this section in the questionnaire. Responses were not categorised in any pattern, the researcher only selected those responses he felt were important. These responses are as follows: have a good attitude and lead by example; must meet all the basic needs of the project team; be a pro-active project manager; must attend project courses to improve skills; delegating responsibilities wisely to the project team; committed; make sure the project have enough human resources, avoid scope creep as much as possible; must not be boss but a great team leader; good planner; technical expertise; stop favouritism among the team; improve on the negotiation skill for resources; must be innovative in thinking; influence the team at all times; be open to ideas from the team; develop project team; coaching of the team; emotional intelligent; Follow the project plan; embrace diversity and culturalism; be more consultative and collaborative with the team members; ensure to have the risk management plan in place; should be transparent; accountable; attend leadership courses; be more optimistic. A lot was said by the respondents but not all was mentioned in the above passage.

5.3 CHAPTER SUMMARY

In this chapter, all the results from the respondents were presented in a clear format and discussed. All the questions that were asked in the questionnaire were presented in the form of graphs and table to make clear for the readers. These questions were analysed in order to answer the questions asked in the questionnaire. The responses from the participants seem to agree with the literature review in chapter 3 of this study. Leadership key elements are aligned with the people. Respondents agreed that they had a project manager that can communicate well and who empathised with the people.

CHAPTER 6

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The main objective of this study is to identify leadership competencies that IT project managers must poses in order to run successful projects. There increase in the demand of the project management skill in the IT industry have compelled the researcher to determine the competencies that are required by project managers to carry out successful projects. The high rate of failure in IT projects which is caused by different reasons with the competencies of the project manager identified as one of those reasons. The intention of the current study is to identify those competencies which would enable the project managers to run successful projects in a company in the Western Cape province of South Africa.

Chapter 1 of the study: the researcher introduced the proposal which outlines the literature review, research objectives, problem statement, research methodology. Researcher also touched on how to deal with ethics in the study. The need to undertake this study is clearly stated in the problem statement.

Chapter 2 of the study: detailed overview of the hard leadership competencies (10 project management knowledge areas).

Chapter 3 of the study: detailed overview of the soft leadership competencies (Transformational and Transactional leadership styles) their critics, as well as how they compare to each other.

Chapter 4 of the study: outlines the research design and research methodology, special focus is placed on the relevance of the design and methodology in relation to the project objectives and the problem statement. The population, sample size, sampling frame were discussed. The sampling techniques was also mentioned and the reason why it was selected for this study. This chapter also gave detailed information on data collection, the instrument used to collect the data, what instruments were used for data editing and data analysis.

Chapter 5 of the study: the data that was collected from all the participants is presented in the form of pie charts, tables, bar charts, graphs and other forms of data presentations. Questions / statements were placed as they appear on the questionnaire, responses were represented on graphs/pie charts/tables/bar charts, the source of each data is labelled using the Harvard referencing, the data that is represented by the charts is then interpreted by the researcher.

Chapter 6 of the study: focuses on the summarization of the findings listed in chapters 5. Conclusions and recommendations were made based on the findings in chapter 5. The questionnaire is arranged into 3 sections: A, B, C, so the reporting will be done in such a way that a question/statement that was responded too by the participant, will be taken from each section of the questionnaire, then there will be comments made for that particular question.

6.2 DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

In chapter 5 all the sections of the questionnaire were discussed in great detail, in this chapter we will briefly discuss and make recommendations on key points of the results and findings that were discussed in chapter 5. Recommendations and conclusions will be made based on the researchers understanding and interpretation of the collected data.

6.2.1 Section A

Section A of the questionnaire contained questions that were asking for biographical information. These questions were asked to make sure that the research sample is a true representation of the population and for statistical purposes. One of the key questions that were asked in this section relates to education. Respondents were asked about their level of education. Figure 6.1 shows the level of education of the respondents involved in IT project execution in the organisation.

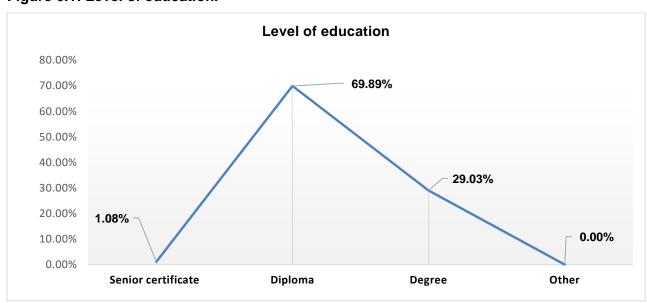


Figure 6.1: Level of education.

Source: own construct

Formal education is very important in IT projects as project teams need to keep up to date with the ever changing world of technology. 69.89% of the project team hold a diploma, 29.03% have their

degrees, and 1.08% had a senior certificate. Education plays a major role in skill development of the project team.

Conclusion: From that data that was collected, we can safely say that the organisation has the required formal education to successfully execute projects, 98.98% of the team had confirmed that they had a university degree or diploma. Previous studies stated that project teams with some form of a formal qualification perform well in projects, which will lead to the success of the project. It is east to communicate with them using the project language as they are aware of the terminology, processes, and the tools used in project execution.

Recommendation: Project team needs to be equipped with formal training (diploma, degree etc.) in order for them to tackle all the project task assigned to them with ease. As IT changes every day, project team must be trained regularly so that they can keep up with the changes of IT projects and learn new and innovative way to execute projects. These can be in-house trainings or school trainings but a formal diploma or degree is a must for project team members.

The second question relates to the level of experience each responded had working in the IT project execution environment. This question is very critical as it assessed the workforce level of experience working in IT projects. Table 6.1 shows the years which respondents have worked on project execution.

Table 6.1: Years working in the IT project execution

Years working in IT project execution					
<= 5 years	6-10 years	11 - 15 years	16 -20 years	21 years and above	
66%	31%	3%	0	0	

Source: own construct

Conclusion: The information presented in table 6.1 clearly shows that the majority of the respondents, which is 66%, are not that experienced when it comes to IT projects. This low experience can be attributed to a number of factors, two examples of such factors are mentioned below:

- The execution of projects was outsourced, and they have just started a couple of years to in doing it inside the organisation.
- There is a young workforce that just came from the university.

34% of the respondents are seasoned professionals, they have been executing projects for 6 to 15 years. These employees have been doing the project work for a very long time, they know what to do.

Recommendation: As a project leader, you should put in place mechanisms that would enable the transfer of skill from the seasoned project team to the less experienced team members. This will enable the less experienced team members to get more knowledge on how to successfully execute their assigned tasks in a project

6.2.2 Section B

This section dealt with the competencies of an effective project leader. Project leaders in any organisation or project are individuals responsible for setting the vision or direction of projects, and aligning them with the overall strategy of an organisation. They are responsible for guiding the project to the right direction. Project leaders spend 90% of their time in projects communicating project work. They are regarded as the integration of projects and therefore expected to be competent enough to execute successful projects. Communication, decision making, leadership, and problem competencies were discussed in detail in chapter 5, in this chapter we will only outline key points, make conclusion and recommendations on them. Table 6.2 shows information collected for communication competency

Table 6.2: Communication competency

Communication competency	Strongly	Disagree	Neutral	Agree	Strongly agree
Unable to effectively communicate project objectives	42%	51%	7%	0%	0%
Communicates work progress to project stakeholders	0%	0%	2%	55%	43%
Do not listen effectively to other team members	44%	50%	4%	2%	0%
Forms up clear and concise written communication	0%	2%	3%	64%	31%
Able to distribute information by emails, memos, presentations, reports	0%	0%	1%	56%	43%
Encourage transparency and the sharing of opinions	0%	1%	4%	70%	25%

Source: own construct

Communication has been found as one of the important traits of an effective project leader. It has been found that communicating right information via right channels to right people in right time removes delays in projects and leads to the success of projects.

Conclusion: distribution of project information to all project stakeholders in time will make the stakeholders to be aware of the project progress, time frame of the tasks, task that have been completed, what still needs to be done, project deliverables. This timely distribution of information

aids in the smooth operation of the project. Communication is said to be successful if the sent messages is received, decoded and its meaning understood by the receiver. The project leader clearly communicates the objectives of the project to the stakeholders, this is confirmed by 93% of the respondents. 7% remained neutral. The project leader of the organisation communicates the project progress to the stakeholders, this is affirmed by 98% of the respondents. The 2% remained who remained neutral might not be getting the information or they might not be attending meetings where the progress is communicated, or they just didn't want to give their input, in fear of giving out organisation sensitive information. The project leader does listen to the project team when giving their input on the project. 94% of the respondents affirmed this, while 4% remained neutral. The last 2% said that the project leader does not listen to them when giving input, this might be because their suggested solution was never used or they just do not like their leader.

Recommendation: It is very important for them to have a detailed communication plan in place. This plan can be established in the initial stage of the project. This plan will have set guidelines of what information must to which stakeholders and the frequency of transmitting that information, by doing that you will be eliminating problems that may arise because of the lack of communication of information which could assist in making informed decisions. Having a detailed communication plan in place ensures that all the project stakeholders receive relevant information in right times.

The second competency is the decision competency. Project leader is evaluated on their decision making process. Table 6.3 shows information collected from the respondents about decision competency

Table 6.3: Decision making competency

Decision making competency	Strongly	disagree	Disagree	Neutral	Agree	Strongly	agree
Scrutinizes available information	0%		1%	17%	60%	22%	
Makes decisions based on relevant information	0%		0%	3%	61%	36%	
Brings up sound decisions while representing integrity	0%		1%	4%	75%	20%	
Follows up on a decision making process	0%		0%	11%	66%	23%	
Use a rational process in making decisions.	0%		0%	16%	60%	60% 24%	
Seek input from relevant stakeholders to increase probability of success	0%		0%	3%	43%	54%	

Source: own construct

Conclusion: Leaders ask for input from project stakeholders when making decisions that affect the stakeholder of a project. 97% of the respondents confirmed that the project leader does ask for their input before decisions are taken. 3% of the respondents were neutral, this might be because, they fear to give out organisation sensitive information. The information on table 6.3 also shows that 97% of respondents said that the decisions project leaders make, are based on relevant information. While 3% of respondents chose to remain neutral. A decision making process is followed by the project leader, before they arrive at any decision, this is confirmed by the 89% of the respondents, 11% remained neutral. This might be attributed to the fact that they did not know nor understand the process that should be followed before reaching a decision.

Recommendations: before project leaders make any decisions they must make sure that necessary information is available. They should seek input from relevant parties before taking major decisions which affect the stakeholder. Project leaders should familiarize themselves with decision making process, and follow it when they take decisions in a project environment. A backup plan should always be available in case the decision to be taken goes amiss. Always anticipate that there will be consequences for decisions made, whether those negatively or positively affect the project.

The third competency is the leadership competency. Leaders are evaluated on their leadership abilities. Table 6.4 shows information collected from the respondents about leadership competency

Table 6.4: Leadership competency

Leadership competency	Strongly	Disagree	Neutral	Agree	Strongly agree	
Do not inspire others to believe in the work they do	46%	44%	8%	1%	1%	
Shares responsibility for successes	0%	0%	15%	71%	14%	
Does not provides vision for the project team	55%	41%	3%	1%	0%	
Influence project team to work without being pressurised.	1%	2%	18%	67%	12%	
Takes a lead in uncertain situations	0%	1%	10%	72%	17%	
Provides trust and reliability to the project team members	1%	0%	5%	68%	26%	
Do not delegates effectively to others	28%	58%	7%	4%	3%	

Source: own construct

Conclusion: table 6.4 shows that, 96% of respondents affirmed that the project leader does provide vision for the project team, while 3% of the respondents remained neutral on the matter. The reason for them to remain neutral might be because, they do not understand the vision communicated to them. 1% disagreed that the is vision given by the project leader. This also can be attributed to the

fact that; they do not fully understand what the vision is for the projects. Leaders delegate some of their duties to the team, 86% confirmed that the project leader does delegate some of his duties to the team. 7% remained neutral, this might be because, they never got any work delegated to them or they just did not want to divulge organisation sensitive information. Another 7% disagreed, again this might be because, they never got any work delegated to them or the is no work that needs to be delegated to them.

Recommendations: project leaders should show instead of telling, must ensure that everyone in the project team have a common vision of where the project team is heading and why, must always try to change the status quo and not leave things as they are. Develop a team that can take decisions in the absence of project manager. Threat the project team with dignity. Project leaders should have both the hard skills and soft skills to execute successful projects. They should be properly screened for the hard and soft leadership competence before they join the organisation, this would make a difference in the organisation project execution.

The forth competency is the problem solving competency. Leaders are evaluated on their abilities to solve problems in projects. Table 6.5 shows information collected from the respondents about problem solving competency

Table 6.5: Problem solving competency

Problem solving competency	Strongly	Disagree	Neutral	Agree	Strongly agree
Not able to identify a problem	54%	43%	2%	0%	1%
Looks for best solutions when resolving problems	0%	0%	8%	62%	30%
Exhibits creativity in problem solving	0%	1%	20%	62%	17%
Collects information related to the problem	1%	0%	4%	58%	37%
Do not engage the team members in trying to come up with the solution to the problem	42%	51%	5%	1%	1%
Responds quickly to arising problems	0%	0%	12%	73%	15%
Does not try to reach amicable solutions	33%	53%	11%	2%	1%

Source: own construct

Conclusion: Project leaders are able to identify problems in projects, 97% confirmed. 2% remained neutral, maybe they are not sure of the project problems or they just do not want to give input about their project managers. 1% of the respondents said, the leaders cannot identify problems of the project, this 1% might be made of the people who have issues with a project manager, or they are

just not aware of how the project manager identifies problems. The team is engaged when brainstorming solutions for a problem, 93% of the respondents are confirming. 5% remained neutral, these respondents might not be part of the decision making team of the project. 2% are disagreeing, again, they might not be part of the decision making team of the project. 92% of the respondents have stated that, a best solution is used to solve a problem. 8% remained neutral, again these might be the people who are not part of the decision making team of the project.

Project leaders are able to solve problems by deeply analysing situations and applying critical and creative thinking in order to solve problem in projects. They are also responsible for deciding what course of action should be taken when problems occur. Once a solution if found for a problem, they implement that solution.

Recommendations: Stakeholders should be engaged when coming up with solutions to problems. Project leaders should follow a problem solving process when they want to resolve a problem. This process involves: the definition of a problem, looking for alternatives, evaluating the alternatives, and implementing the most viable solution to the problem. Best solution should be used.

6.2.3 Section C

These section was for open ended questions, so respondents stated what they were expecting from an efficient and effective project leader. Recommendations are made on this section based on the responses made by the participants of the study.

Recommendations: it is recommended that project leaders attend seminars, classes, trainings, short courses which deal with leadership, communication, quality, strategies, negotiation, people management skills and other courses that would sharpen the leader's ability to work with teams of people in an organisation.

6.3 CONCLUSION

The objective of this study was to identify those competencies of a project manager that makes them to execute successful projects in the IT industry. The current study revealed that an effective project manager should have hard skills and soft skills. A large number of IT projects have been failing even though the project managers have the hard skills. This study focused more on finding out the soft skills. Communication was identified as one of the soft skills the project manager should poses to run successful projects. Frehsee (2013:17) stated that organisation that distributed project communication on time performed 37% better than those that did not. Leadership skill was also mentioned in the previous chapter as the skill the project manager must have. A project manager

that has a leadership skill is able to influence the project team to a take a particular direction that they see good for the organisation. Under leadership, we mentioned two leadership styles (Transformational and Transactional) that are very important to project managers. We mentioned transformational leadership as the ability of the project leader to inspire, motivate, develop, and intellectually stimulate people in an organisation, whereas transactional leadership there is an exchange relationship/contract built between the leaders and follower. This exchange can be in the form monetary terms, time off or whatever the leader and a follower agree upon.

The hard skill that project managers should master is the PMBOK as mentioned in chapter 2. PMBOK has 10 knowledge areas that are grouped under 5 process groups with 47 processes. Responded also put some suggestions of how they prefer the project manager do in projects, some of the key points were highlighted in section C chapter 5.

This study adds to the already existing body of knowledge about this subject. As the IT projects evolve every day, there will be a need to continue with other studies on this subject to find out more and more of the competencies that would be required in future to run successful IT project. This study has some limitations. This study gave a lot of insight but was only conducted in one organisation in the Western Cape and not the whole South Africa. Looking at the responses from all those respondents that participated on the study, we can conclude that the project manager is equipped with the necessary competencies which will enable him/her to run successful projects. Responses captured from the project team seem to suggest that the project manager in the organisation was performing according to what the literature review said a competent project manager should. All the responses are believed to be saying that the project manager has what it takes to execute successful projects as detailed in the literature review of the current study.

7. REFERENCES

- Afshari, L., Gibson, P. (2016). How to increase organizational commitment through transactional leadership, *Leadership & Organization Development Journal*, 37(4): 507-519
- Ahmad, F., Abbas, T., Latif, S., Rasheed, A. (2014). Impact of transformational leadership on employee motivation in telecommunication sector. *Journal of Management Policies and Practices*, 2(2): 11-25.
- Angle, Jr, S. M. (2007). An Investigation of Construct Validity in Teaching American History Portfolios. *ProQuest Information and Learning Company*.
- Antonakis, J., Avolio, B.J. & Sivasubramaniam, N. (2003). Context and leadership: an examination of the nine-factor full range leadership theory using the multifactor leadership questionnaire, *Leadership Quarterly*, 14: 261-295.
- Aryee, L.Y., Sun, Z.X., Chen., & Debrah, Y.A. (2008). Abusive supervision and contextual performance: The mediating role of emotional exhaustion and the moderating role of work unit structure. *Management and Organization Review* (4): 393–411.
- Asunakutlu, T. (2007). Trust, culture and organizational reflections", in Erdem, R and Cukur, C. \$. (Eds.), Managerial-Organizational Behaviour in Cultural Context, *Turkish Psychological Association Publishing, Ankara*.
- Avolio, B.J., Waldman, D.A., & Yammarino, F.J. (1991). Leading in the 1990s: the four I's of transformational leadership. *Journal of European Industrial Training*, 15(4): 9-16.
- Baccarini, D. (1999). The logical framework method for defining project success. *Project Management Journal*:30(4), 25-32.
- Badke, W.B. (2004). Research Strategies: Finding your Way through the Information Fog. 2nd Ed. Universe Inc.
- Barna, L. (2013). Assessing the importance of project management soft competencies in an IT and telecommunication company. *Club of Economics in Miskolc' TMP*, 9(1): 17-21.
- Barrette, E. (2010). Balancing powers: Leadership and followership in community. *Communities* 148(1), 30-33.
- Bass B. M. (1997). The ethics of transformational leadership, KLSP: Transformational Leadership, Working Papers.
- Bass, B. M. (1985). Leadership and Performance Beyond Expectations. *New York. The Fee Press, Adivision of Mcmillan, Inc.*
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd. ed.). *Mahwah, NJ: Lawrence Erlbaum Associates*.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic trans-formational leadership behavior. *Leadership Quarterly*, 10: 181–217.
- Bass, B.M. (1990). Bass & Stodgill's Handbook of Leadership. Theory, Research and Managerial Applications (3rd ed.). *New York, NY: The Free Press*.

- Bass, B.M., & Avolio, B.J. (1994). Introduction. In B.M. Bass & B.J. Avolio (Eds.), Improving Organisational Operational Effectiveness. *Thousand Oaks, CA: Sage*.
- Bass, B.M., Avolio, B.J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *International Review of Applied Psychology*, 45: 5–34.
- Bass, B.M., Avolio, B.J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world class level. *Journal of Management*, 13, 7-19.
- Bateman, T. S. (2011). Beyond charisma: What followers really need from their leaders. *T+D*: 65(6), 70-72.
- Benator, B. & Thumann, A. (2003). Project Management and Leadership Skills for Engineering and Construction Projects, *United States of America: The Fairmont Press, Inc. New York.*
- Beri, G.C. 2008. Marketing Research 4th Ed. Tata: McGraw-Hill.
- Bhattacharya, D. K. (2006). Research Methodology 2nd Ed. New Delhi: Anurag Jain.
- Black, K. (2012). Bussiness Statistics: For Contemporary Decision Making 7th Ed. *Hoboken, NJ: John Wiley & Sons*.
- Blake, G., & Mouton, B. (1985). The Managerial Grid iii: The Key to Leadership Excellence, Houston; Gulf Publishing Co.
- Blumberg, B., Cooper, D. R., and Schindler, P. S., (2008). Business Research Methods. (2nd edition). New York: McGraw-Hill.
- Bovis, C. (2007). Public Procurement Law, Edward Elgar Publishing Limited, Glensanda House.
- Boyatzis, R.E. (2008). Competencies in the twenty-first century, Journal of Management Development, 27(1): 5-12
- Brace, I. 2008. Questionnaire Design: How to plan, structure and write survey material for effective market research. 2nd ed. *London: Kogan Page Limited*.
- Brannen, J. (2005). Mixed Methods Research: A discussion paper. Economic and Social Research Council National Centre for Research Methods. NCRM Method review papers, NCRM/005.
- Brauckmann, S. and Pashiardis, P. (2011). A validation study of the leadership styles of a holistic leadership theoretical framework, *International Journal of Educational Management*: 25(1): 11-32.
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O.K. and Espevik, R. (2014). Dailytransactional and transformational leadership and daily employee engagement, *Journal of Occupational and Organizational Psychology*, 87(1):138-157.
- Brugha R. and Z. Varvasovszky (2000). "Stakeholder Analysis: a review", Health Policy and Planning, 15(3): 239-246.
- Bryman, A. & Bell, E. (2003). Business Research Methods. Oxford: Oxford University Press.
- Bunmi, O. (2007). "Effects of leadership style on job related tension and psychological sense of community in work organizations: a case study of four organizations in Lagos State, Nigeria", Bangladesh Journal of Sociology, 14(2): 45-73.
- Burns, J.M. (1978). Leadership. New York: Harper & Row Publishing.

- Burns, R.B. and Burns, R.A. (2008). Bussiness Research Methods and Statistics Using SPPS. London: SAGE Publishing.
- Bush, T. (2003). "Theories of Educational Leadership and Management", *Sage, Thousand Oaks, CA*.
- Bushra, F., Ahmad, U., Naveed, A. (2011). Effect of transformational leadership on employees' job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *International journal of Business and Social science*, 2(18): 261-267.
- Cavazotte, F., Moreno V., Bernard, J. (2013). Transformational Leaders and Work Performance: The Mediating Roles of Identification and Self-efficacy. *Brazilian Administration Review*, 10(4): 490-512.
- Chaleff, Ira (2003), The Courageous Follower, 2nd ed., San Francisco, CA: Berrett-Koehler.
- Charry, K. (2012). Leadership Theories 8 Major Leadership Theories. Retrieved March 14, 2018 fromhttp://psychology.about.com/od/leadership/p/leadtheories.htm
- Chin, C. M. M., and Spowage, A. C, (2010). Defining and Classifying Project Management Methodologies. *PM World Today*, 12(5), 1-9.
- Cho, C., & Gibson Jr, G. E. (2001). Building project scope definition using project definition rating index. *Journal of Architectural Engineering*, 7(4) 115-125.
- Cleland, D., & Ireland, L. R. (2006). Project Management, 5th ed. McGraw -Hill, Boston.
- Cleveland, J., Stockdale, M. & Murphy, K.R. (2000). Woman and Men in Organisations. *London: Lawrence Erlbaum Associates.*
- Collis, J. Hussey, R. (2009). Business Research: A practical guide for undergraduate and postgraduate students. 3rd ed. *New York: Palgrave Macmillan*.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic leadership in organiza-tions. *Thousand Oaks, CA: Sage.*
- Cooper, D.R. & Schindler, P. S. (2008). Business Research Methods. 10th ed. Ohio: Mcgraw-Hill.
- Cox, R., Plagens, G. K., & Sylla, K. (2010). The leadership-followership dynamic: Making the choice to follow. *International Journal of Interdisciplinary Social Sciences*, 5(8), 37-51.
- Crawford, L.W. and Turner, J.R. (2007). Developing the project management competence of individuals, in Turner, J.R. (Ed.), Gower Handbook of Project Management, 4th ed., *Gower Publishing, Aldershot*.
- Dawson, C. (2002). Practical Research Methods: A User-friendly Guide to Mastering Research Techniques and Projects. *Oxford: How to books*.
- De Vos, A.S., Strydom, H., Fouche, C.B. and Delport C. S. L. (2009). Research at Grass Roots for the Social Sciences and Human Service Professions. Third Edition. *Pretoria: Van Schaik Publishers*.
- Densten, I. (2003). Senior police leadership: Does rank matter? Policing: *An International Journal of Police Strategies and Management*, 26(3), 400-418.
- Devlin, A. S. (2006). Research Methods. Belmont: Thompson Wadeworth.

- Dixon, G, Westbrook, J. (2003) Followers revealed. *Engineering Management Journal*, 15(1): 19–25
- Duckett, H., & Macfarlane, E. (2003). Emotional intelligence and transformational leadership in retailing, *Leadership & Organization Development Journal*, 24(6):309-317.
- Dulewicz, V., Higgs, M.J. (2005). Assessing leadership styles and organizational context. *Journal of Managerial Psychology*, 20: 105–123.
- Emery, C. R., & Barker, K. J. (2007). The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *Journal of Organizational Culture, Communication & Conflict*, 11(1):77-90.
- Engelbrecht, A.S. (2002). 'The effect of organisational leadership on value congruence and effectiveness: An integrated model', *South African Journal of Economic and Management Sciences*, 5(3): 589-606.
- Erkutlu, H. (2008). The impact of transformational leadership on organizational and leadership effectiveness: The Turkish case. *Journal of Management Development*, 27 (7): 708-726.
- Erkutlu, H. V., Chafra, J. (2006). Relationship between leadership power base and job stress of subordinates: example from boutique hotels, *Management Research News*, 29(5): 285-297
- Farling, M.L., Stone, A.G. and Winston, B.E. (1999). Servant leadership: setting the stage for empirical research, *The Journal of Leadership Studies*, 6(1/2): 49-72.
- Flanagan, L. & Jacobsen, M. (2003). Technology leadership for the twenty-first century principal", Journal of Educational Administration, 41(2):124-142.
- Flick, U. (2011). Introducing Research Methodology: A Beginner's Guide to Doing a Research Project. *London: Sage Publications*.
- Frehsee, N. 2013.Loudeand Clear. PM Network, 27(7):16.
- Geijsel, F., Sleegers, P., Leithwood, K. and Jantzi, D. (2003). Transformational leadership effects on teachers' commitment and effort toward school reform, *Journal of Educational Administration*, 41(3): 228-256.
- Gellis, Z.D. (2001). Social work perceptions of transformational and transactional leadership in health care. *Social Work Research*, 25(1): 17-25.
- Gerber, P.D., Nel, P.S., & Van Dyk, P.S. (1996). Human Resource Management. Johannesburg: International Thompson Publishing.
- Gerrish, K. and Lacey, A. (2010). The Research Process in Nursing. 6th Ed. West Sussex: *Blackwell Publishing.*
- Gitlow, H. S., Oppernheim, A. J., Oppenheim, R and Levine, D. M. (2005). Quality Management. 3rd ed. *McGraw-Hill, Boston*.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research, *The Qualitative Report*, 8(4): 597-607.
- Goleman, D. (2000). Leadership that gets results, Harvard Business Review, *Harvard Business School, Boston, MA*.

- Grant, A.M. (2012). Leading with meaning: beneficiary contact, prosocial impact, and the performance effects of transformational leadership. *Academy of Management Journal*, 55 (2): 458-476.
- Gray, C & Larson, E. (2002) Project management: The managerial process, 2nd edition. Australia: *McGraw-Hill Australia Pty Limited*.
- Gruban, B. (2003). Kompetence: Moda, Ki Traja Že Štiri Desetletja. Finance, 168/1596, str. 19
- Hacker, S., Roberts, T. (2004). Transformational leadership: creating organizations of meaning Quality Press, *United States of America*
- Hater, J.J. & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73: 695—702
- Heathfield, M. (2009) What people want from work: motivation, *Human Resource Journal*, 12(3): 28-55.
- Hellegriel, D., Jackson, S.E., Slocum, J.W., Amos, T., Klopper, H.B., Louw, L., & Oosthuizen, T. (2004). Management. (2nd ed.). *Cape Town: Oxford University Press Southern Africa*.
- Hernandez, M., Eberly, M. B., Avolio, B. J., & Johnson, M. D. (2011). The loci and mechanisms of leadership: Exploring a more comprehensive view of leadership theory. *The Leadership Quarterly*, 22: 1165–1185.
- Hersey, P., Blanchard, K. H., & Natemeyer, W. E. (1979). Situational Leadership, Perception, and the Impact of Power. *Group & Organization Studies* (pre-1986), 4(4), 418.
- Hoffman, B.J., Bynum, B.H., Piccolo, R.F., & Sutton, A.W. (2011). Person-Organization Value Congruence: How Transformational Leaders Influence Work Group Effectiveness. *Academy of Management Journal*, 54(4): 779-796.
- Howell, J.M. & Hall-Meranda, K.E. (1999). The ties that bind: The impact of Leader-Member Exchange, transformational and transactional leadership, and distance on predicted follower performance. *Journal of Applied Psychology*, 84(5): 680-694.
- Hsu, S-Y. and Mujtaba, G. (2007). Team transformational leadership, trust, satisfaction, and commitment: the testing of a structural equation model in software development teams, *Review of Business Information Systems*, 11(3): 17-28.
- Hughes, I. and Avey, M. (2009) transforming with levity: humour, leadership, and follower attitudes, Leadership and Organization Development Journal, 30(6): 540-562.
- Hunter, S. T. Bedell-Avers, K. E. and Mumford, M. D. (2007). The typical leadership study: Assumptions, implications, and potential remedies. *The Leadership Quarterly*, 18: 435-446
- Jogulu, U.D., & Wood, G.J. (2008). A cross-cultural study into peer evaluations of women's leadership effectiveness. *Leadership & Organisation Development Journal*, 29 (7): 600-616
- Johnson, B. & Christensen, L. (2012). Educational Research: Quantitative, Qualitative and Mixed Approaches. 4th Ed. California: *SAGE Publications*.
- Johnson, B. & Christensen, L. 2012. Educational Research: Quantitative, Qualitative and Mixed Approaches. 4th Ed. California: *SAGE Publications*.

- Johnson, R.B. & Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come.
- Jowah, E.L. (2013). Critical Core Competencies for Effective Strategic Leadership in Project Management. PhD thesis, Nelson Mandela Metropolitan University.
- Jowah, L. E. (2011). Research Methodology, Jowah Book Publishers, Cape Town.
- Jowah, L.E. (2013). Followership: The Forgotten Kingmaker for Effective Leadership. *Journal of US-China Public Administration*, 10 (7): 708-719
- Jowah, L.E., Laphi, L. (2015). Project Leadership Competencies: The Case of Project Leadership in Construction Project. *Entrepreneurship and Innovation Management Journal*, 3 (1): 15-39.
- Judge TA, Piccolo R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768.
- Jung, D. I., & Sosik, J. J. (2002). Transformational leadership in work groups: The role of empowerment, cohesiveness, and collective efficacy on perceived group performance. Small Group Research, 33: 313-336.
- Jung, D.I. and Avolio, B.J. (2000). Opening the black box: an experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership, *Journal of Organizational Behavior*, 21(8), 949-964.
- Kanungo, R., & Mendonca, M. 1996. Ethical dimensions of leadership. Thousand Oaks, CA: Sage.
- Karaman, E., & Kurt, M. (2015). Comparison of project management methodologies: Prince 2 versus PMBOK for IT projects. *Journal of Applied Sciences and Engineering Research*, 4(4), 572-579.
- Katz, B. (2007). The integration of project management processes with a methodology to manage a radical innovation project, (Dissertation: MSc Industrial Engineering, University of Stellenbosch. Stellenbosch.
- Ke, W. and Wei. K (2008). Organizational Culture and Leadership in ERP Implementation, Decision Support Systems, 45(2): 208-218.
- Kelley, R. (1992). The power of followership: How to create leaders people want to follow and followers who lead themselves. *New York: Double day Currency*
- Kelley, R. E. (1988). In praise of followers. Harvard Business Review, 66(6), 142-148.
- Kerzner H (2009). Project Management: A Systems Approach to Planning, Scheduling and Controlling, 10th ed. *John Wiley & Sons, Inc., New York*.
- Khan, J.A. (2008). Research methodolog. New Delhi: APH Publishing.
- Klenke, K. (2008). Qualitative Research in the Study of Leadership. Bingley: *Emerald Group Publishing Limited*.
- Kothari, C.R. (2004). Research methodology: Methods & techniques. 2nd Ed. New Delhi: *New Age International*.
- Kotter, J. P. (1990). A force for change: How leadership differs from management. *San Francisco: Jossey-Bass.*

- Kouzes, J. M., Posner, B. Z. (2002). The Leadership Challenge, 3rd Edition, Jossey-Bass
- Kreitner, R. (2009). Management. 11th edition. Canada: Houghton Mifflin Harcourt Company.
- Kumar, R. (2005). Research methodology: A step by step guide for beginners. 2nd edition. *New Delhi: SAGE.*
- Kumar, R. (2011). Research methodology: A step by step guide for beginners. 3rd Ed. *London: SAGE.*
- Kutsch, E., & Hall, M. (2009). The Rational Choice of Not Applying Project Risk Management in Information Technology Projects. *Project Management Journal*, 40 (3): 72 81.
- Kythreotis, A., Pashiardis, P. and Kyriakides, L. (2010). The influence of school leadership styles and culture on students' achievement in Cyprus primary schools, *Journal of Educational Administration*, 48(2): 218-240.
- Landy, F.J. and Conte, J.M. (2010). Work in the 21st Century: An Introduction to Industrial and Organizational Psychology. 3rd ed. Hoboken, *NJ: John Wiley and Sons*.
- Leedy, P.D. and Ormrod, J.E. (2005). Practical Research Planning and Design. *NewJersey: Pearson, Prentice Hall.*
- Lewin, K., Lippit, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology.*, 10: 271-301.
- Lewin, K., Lippitt, R. and White, R.K. (1939). Patterns of aggressive behavior in experimentally created 'social climates', *Journal of Social Psychology*, 10 (1): 271-299
- Likert, R. (1967). The human organization: Its management and value, New York: McGraw-Hill
- Limsila, K., Ogunlana, S. (2008). Performance and leadership outcome correlates of leadership styles and subordinate commitment. *Engineering Construction and Architectural Management*, (15): 164–184.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review. Leadership Quarterly, 7: 385-425.
- Maroosis, J. (2008). Leadership: A partnership in reciprocal following. In R. E. Riggio, I. Chaleff, & J. Lipman-Blumen (Eds.), The art of followership (pp. 17-24). *San Francisco, CA: Jossey-Bass*.
- Martin, B., Cashel, C., Wagstaff, M., & Breunig, M. (2006). Outdoor Leadership: theory and practice. *USA: Human Kinetics*.
- Martin, J. and Marion, R. (2005) "Higher education leadership roles in knowledge processing", Learning Organization, 2(2): 140-151.
- Martin, R. (2008). Followership: The natural complement to leadership. *FBI Law Enforcement Bulletin*, 77(7), 8-11.
- Matthews, B. and Ross, L. (2010). Research Methods, a Practical Guide for the Social Sciences. *Harlow: Pearson Education Limited.*

- Maylor, H. and Blackmon, K. (2005). Research Business and Management. New York: Palgrave Macmillan.
- Mazibuko, N. E., Tait, M., Jowah, L.E. (2015). Critical core competencies required for effective project leadership in the presence of the authority gap, *Journal of Contemporary Management*, 12(1): 313 335.
- Mcnee, C.L. & McCabe, S. 2008. Understanding Nursing Research: Reading and Using Research in Evidence Based Practice. 2nd Ed. *Philadelphia: William and Wilkins*.
- Mehrotra, A. (2005). Leadership Styles of Principals, Mittal publications, New Delhi.
- Meredith J.R., and Mantel S.J., (2012). Project Management: A Managerial Approach. *Asia: John Wiley and Sons.*
- Meredith, J., Shafer, S., Mantel, S. and Sutton, M. (2011). Project management in practice. 4th ed. *John Wiley & Sons, Incorporated.*
- Millers, T. I. and Plant, M. (1977). Disguised and undisguised questionnaires compared: Two alternative approaches to drinking behaviour surveys. *Social Psychiatry*, 12 (1): 21-24
- Mondy, R. W., &Premeaux, S. R. (1995). Management (7th ed.). *Englewood-Cliffs-New Jersey: Prentice-Hall.*
- Morris, P. W. G. (2001). Updating the project management bodies of knowledge: a quantitative approach. *Project Management Journal*, 32(3), 21–30.
- Mouton, J. (2001). How to succeed in your Masters and Doctoral Studies. A South African Guide and Resource Book. *Pretoria: Van Schaik*.
- Mulenburg, G. M. (2000). The characteristics of project managers: An exploration of complex projects in the National Aeronautics and Space Administration. *California: AMES Research Centre*.
- Murch, R. (2011). Best practices for IT professionals, *Prentice Hall.Education USA*.
- Naidu, J., & Van der walt, M. S. (2005). An exploration of the relationship between leadership styles and the implementation of transformation interventions. *SA Journal of Human Resource Management*, 3 (2), 1-10.
- Nemanich, A. and Keller, T. (2007). Transformational leadership in an acquisition: a field study of employees, *Leadership Quarterly*, 18(1): 49-68.
- Northouse, P.G. (2004). Leadership: Theory and Practice. Thousand Oaks, CA: Sage
- Obiwuru, T.C., Okwu, A.T., Akpa, V.O., Nwankwere, I.A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. *Australian Journal of Business and Management Research*, 1(7):100 111.
- Odumeru, J.A. and Ifeanyi, G.O. (2013). Transformational vs transactional leadership theories: evidence in literature, *International Review of Management and Business Research*, 2(2): 355-361.

- Onwuegbuzie, A. J., & Leech, N. L. (2006). Linking research questions to mixed methods data analysis procedures. *The Qualitative Report*, 11(3), 474-498.
- Panneerselvam, R. (2004). Research methodology. Eastern company Edition. New Delhi: Prentice-Hall.
- PMI, (2013). A guide to Project Management Body of Knowledge (PMBOK Guide). Project Management Institute, *Newton Square*, *PA*.
- Podsakoff, P.M., MacKenzie, S. and Bommer, W.H. (1996). Transformational leader behaviours and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviours, *Journal of Management*, 22(2):259-298.
- Powers, B.A. Knapp, T. R. (2006). Dictionary of NursingTheory and Research. 3rd Ed. *New York: Springer Publishing Company.*
- Project Management Institute (2013). A Guide to the Project Management Body of Knowledge, 5th edition. *Pennsylvania, USA: Project Management Institute, Inc.*
- Quinton, S. & Smallbone, T. (2006). Postgraduate Research in Business: A critical guide. *London:* Sage Publications.
- Rafferty, A.E., & Griffin, M.A. (2006). Refining individualized consideration: distinguishing developmental leadership, and supportive leadership, *Journal of Occupational* & *Organizational Psychology*, 79: 37-61.
- Ravichandran, S., Gilmore, S. and Strohbehn, C. (2007), "Organizational citizenship behaviour research in hospitality: current status and future research directions", *Journal of Human Resources in Hospitality & Tourism.*, 6(2): 59-78.
- Robbins, S. P., Judge, T. A. & Sanghi, S. (2007). Organizational Behavior. (12th ed.). *India: Pearson: Prentice Hall.*
- Robbins, S.P. (2003). Organisational Behaviour (10th ed.). New Jersey: Prentice Hall.
- Robertson, I., Gibbons, P., Baron, H., MacIver, R., & Nyfield, G. (1999). Understanding management performance. *British Academy of Management*, 10(1): 5–12
- Rowold, J., Heinitz, K. (2007). Transformational and charismatic leadership: Assessing the convergent, divergent and criterion validity of the MLQ and the CKS. *The Leadership Quarterly*, 18(2): 121-133.
- Rubin, A & Babbie E.R. (2011). Research method for social work. 7th Ed. Belmont, CA: Brooks/Cole.
- Rubin, R.S., Munz, D.C., & Brommer, W.H. (2005), "Leading from within: the effects of emotion recognition and personality on transformational leadership behaviour", *Academy of Management Journal*, 48 (5): 845
- Ruggieri, S. (2009). Leadership in virtual teams: a comparison of transformational and transactional leaders. *Social Behaviour and Personality*, 37(8): 1017-1022.
- Sarros, J.C., Santora, J.C. (2001) The transformational-transactional leadership model in practice, Leadership & Organization Development Journal, 22(8):383-394

- Saunders, M, Lewis, P, and Thornill. A. (2012). Research methods for business students. Sixt edition, *Pearson education limited, London, UK*.
- Schreuder, J.A.H., Roelen, C.A.M., Van Zweeden, N.F., Jongsman, D., Van der Klink, J.J. and Groothoff, J.W. (2011). Leadership effectiveness and recorded sickness absence among nursing staff: a cross-sectional pilot study, *Journal of Nursing in Management*, 19 (5): 585-595.
- Schultz, K.S. and Whitney, U.J. 2005. Management Theory in Action: Case Studies and Exercises. *California: Sage Publication Inc.*
- Sekaran, U. (2003). Research Methods for Business: a skill building approach. 4th Ed. New York: John Wiley and Sons.
- Sekaran, U. 2003. Research Methods for Business: a skill building approach. 4th ed. *New York: John Wiley and Sons.*
- Shaw, S. (2007). Nursing Leadership. Blackwell Publishing, Oxford.
- Shenhar, A.J., Dvir, D. (2007). Reinventing Project Management. *USA: Harvard Business School Publishing.*
- Singh, R., and Lano, K., (2014). Literature Survey of previous research work in Models and Methodologies in Project Management. *International Journal of Advanced Computer Science and Applications*, 5 (9), 107-122.
- Singh, Y.K. and Nath, R. (2007). Research Methodology. New Delhi: APH Publishing Corporation.
- Spears, L. (1995). Servant-leadership and the Greenleaf legacy, in Spears, L. (Ed.), Reflections on Leadership: How Robert K. Greenleaf's Theory of Servant-leadership Influenced Today's Top Management Thinkers, *John Wiley & Sons, Inc., New York, NY*.
- Spendlove, M. (2007). Competencies for effective leadership in higher education, *International Journal of Educational Management*, 21(5): 407-417.
- Stone, A. G., Russell, R.F., Patterson K. (2004). Transformational versus servant leadership: a difference in leader focus, *Leadership & Organization Development Journal*, 25(4):349-361
- Sullivan, L. E. 2009. The Sage Glossary of the Social and Behavioural Sciences. California: Sage Publications Inc.
- Sumner, M., Bock, & D., Giamartino, G. (2006). Exploring the linkage between the characteristics of IT project leaders and project success. *Information Systems Management*, 23(4), 43-49.
- Tannenbaum, R., Schmidt, W. (1973). How to choose a leadership pattern. *Harvard Business Review*, 51(3):162-180.
- Thomas, R.M. (2003). Blending Qualitative and Quantitative Research Methods in Theses and Dissertations. *California: Corwin Press*.
- Tichy, N.M., & Devanna, M.A. (1990). The Transformational Leader. New York: Wiley & Sons, Inc.
- Townsend, P. L., & Gebhardt, J. E. (2003). The leadership-followership continuum. *Leaders to Leaders*, 29(1), 18-21.

- Trottier, T., Van Wart, M., & Wang, X. H. (2008). Examining the nature and significance of leadership in government organizations. *Public Administration Review*, 68, 319-333.
- Ulrich, D., Zenger, J., & Smallwood, W.N. (1999). Results-Based Leadership. *Boston MA: Harvard Business School Press*.
- Vishalli, D.K.K. & Mohit, P.K. (2004). Augmenting subordinates' competencies. *Journal of Management Research*, 4(3): 164-170
- Vredenburgh, D. and Brender, Y. (1998). 'The hierarchical abuse of power in work organizations', *Journal of Business Ethics*, 17(12): 1337–1347
- Waldman, D. A., Bass, B. M., & Yammarino, F. J. (1990). Adding to contingent-reward behavior: The augmenting effect of charismatic leadership. *Group and Organization Studies*, 15: 381–394.
- Walsh, M. & Wigens, L. (2003). Introduction to research. Cheltenham: Nelson Thornes Ltd.
- Wamocha, L.M, Muliro, M., Nasongo, J.W & Injendi, J. (2012). Intervention Measures in Conflict 144

 Management in Boarding Secondary. Maxwell Scientific Organization. Kenya. *Current Research Journal of Social Sciences*. 4(2): 103-108.
- Wei Z (2009). The relationship between project manager leadership style and project success, A Seminar paper presented to the Graduate Faculty; University of Wisconsin
- Weihrich, H., Cannice, M.V. and Koontz, H. (2008) Management (12th ed.). *New Delhi: Mc Graw Hill.*
- Welman, C., Kruger, F. & Mitchell, Kumar, R. (2005). Research methodology 3rd edition. *Cape Town: Oxford University Press.*
- Yang, L.R., Huang, C.F. & Wu, K.S. (2011). The association among project manager's leadership style, teamwork and project success. *International Journal of Project Management*, 29(3): 258–267.
- Yilmaz, K. (2008). The relationship between organisational trust and organisational commitment in Turkish primary schools. *Journal of Applied Sciences*, 8(12):2293-2299
- Yukl, G. (1998), Leadership in Organizations, 4th ed., Prentice-Hall, Inc., Upper Saddle River, NJ.
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The Leadership Quarterly*, 10(2): 285-305.
- Yukl, G. (2002), Leadership in Organizations, 5th ed., Prentice-Hall, Inc., Upper Saddle River, NJ.
- Yukl, G. (2006). Leadership in Organisations (6th ed.). *Upper Saddle River, New Jersey: Pearson Prentice Hall.*
- Zimmerer, T. & Yasin, M. (1998). A leadership profile of American project managers. *Project Management Journal*, 29(1): 1–13.

Internet

Cox, P.L. (2001). Transformational leadership: a success story at Cornell University. Proceedings of the ATEM/aappa 2001 conference. Retrieved February, 2018, from http://www.anu.edu.au/facilities/atem-aappaa/full papers/Coxkeynote.html

- Hall, J., Johnson, S., Wysocki, A. & Kepner, K. (2002). Transformational leadership: the transformation of managers and associates. Retrieved February 13, 2018, from http://edis.ifas.ufl.edu
- Kelly, M.L. (2003, January 1). Academic advisers as transformational leaders. The Mentor. Retrieved february, 2018, from http://www.psu.edu/dus/mentor/030101mk.htm
- Yates, M. (2002) Genghis Khan. Leader Values. Retrieved August 3, 2017 from http://www.leader-values.com/historicalleaders/.

1

QUESTIONNAIRE

Leadership competencies for effective IT projects execution in a company in the Western Cape Province of South Africa.

This is an academic exercise and participation is voluntary, no one is forced to take part in this survey.

PLEASE DO NOT PUT ANY MARKS THAT MAY IDENTIFY YOU OR YOUR ORGANISATION.

You are free to discontinue in the middle of the survey if you are not happy / satisfied. No information will be passed on to any authority and your identity is protected and the information is confidential.

SECTION A.

BIOGRAPHY

Please cross the applicable boxes

1. What is your position in the organisation?

Manager	Supervis	sor	Technicia	ın	Administration	on	other	
2. If other, ple	ase specif	y	******	*******************				
3. Please sele	ct your ag	e range in t	he box be	low				
<= 20 years	21 –	30 years	31 – 40 y	ears	41 – 50 years	rs 51 years and abo		
4. Level of edu	ucation?							
Senior certificate Diploma			Degree			other		
5. If other, ple 6. How long h	-	-						
<=5 years	6-10	years	11-15 ye	ars	16-20 years	21 y	ears and above	
7. How long h				rganisat	tion?	_yeaı	rsmonths	
	icipate in	Project med	eting?					

9. What is the structure of reporting when project are carried out?

Projectized structure	Reporting only to the project manager, project manager responsible for the entire project
Matrix structure	Project manager and functional manager work together
Functional structure	Reporting only to the functional manager, functional manager
	responsible for the entire project

10. Why did you come to work on this job?

I am qualified	Given to me by a friend	Liked the working hours	other
11. If other, please pec	ify		

SECTION B

What do you consider as acceptable behaviour by a project leader? Please rank the following by crossing the most applicable; 1- strongly disagree, 2 - disagree, 3 - neutral, 4- agree, and 5-strongly agree.

CON	MPETENCIES FOR AN EFFECTIVE PROJECT LEADER	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
CON	IMUNICATION COMPETENCY					
1	Unable to effectively communicate project objectives	1	2	3	4	5
2	Communicates work progress to project stakeholders.	1	2	3	4	5
3	Do not listen effectively to other team members.	1	2	3	4	5
4	Forms up clear and concise written communication	1	2	3	4	5
5	Able to distribute information by emails, memos, presentations, reports	1	2	3	4	5
6	Encourage transparency and the sharing of opinions	1	2	3	4	5
DEC	ISION MAKING COMPETENCY					
7	Scrutinizes available information	1	2	3	4	5
8	Makes decisions based on relevant information	1	2	3	4	5
9	Brings up sound decisions while representing integrity	1	2	3	4	5
10	Follows up on a decision making process	1	2	3	4	5
11	Use a rational process in making decisions.	1	2	3	4	5
12	Seek input from relevant stakeholders to increase probability of success	1	2	3	4	5
LEA	DERSHIP COMPETENCY					
13	Do not inspire others to believe in the work they do	1	2	3	4	5
14	Shares responsibility for successes	1	2	3	4	5
15	Does not provides vision for the project team	1	2	3	4	5
16	Influence project team to work without being pressurised.	1	2	3	4	5
17	Takes a lead in uncertain situations	1	2	3	4	5
18	Provides trust and reliability to the project team members	1	2	3	4	5
19	Do not delegates effectively to others	1	2	3	4	5
PRO	BLEM SOLVING COMPETENCY					
20	Not able to identify a problem	1	2	3	4	5
21	Looks for best solutions when resolving problems	1	2	3	4	5
22	Exhibits creativity in problem solving	1	2	3	4	5
23	Collects information related to the problem	1	2	3	4	5
24	Do not engage the team members in trying to come up with the solution to the problem	1	2	3	4	5
25	Responds quickly to arising problems	1	2	3	4	5
26	Does not try to reach amicable solutions	1	2	3	4	5
	-		1			i

SECTION C

Open ended questions

List things that project managers are doing well in order for you to work efficiently.
1
2
3
4
5
List things that project managers can change in-order for them to be effective project leaders
1
2
3
4
E

THANK YOU FOR PARTICIPATING IN THIS VOLUNTARY EXERCISE.