

**An analysis of the influence of Managerial Capital on
Sustainable Service Delivery: A case study of local
municipalities in South Africa**

By

TSEKE MMETHI

Reg No.:179034

Submitted in partial fulfilment of the requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

At

REGENESYS BUSINESS SCHOOL

SUPERVISOR: DR. SPIWE MASARIRA

March 2021

DECLARATION OF ORIGINAL WORK

I, **Tseke Alex Mmethi** declare that the research proposal entitled: “An analysis of the influence of managerial capital on sustainable service delivery: A case study of local municipalities in South Africa”

The submission of the research proposal is in partial fulfilment of Master’s in Business Administration at Regenesys Business School.

I confirm to have never submitted the research for any degrees or examination purposes at any other university nor at any other educational institution.

30th March 2021

Signature: Tseke A Mmethi

Date

ACKNOWLEDGEMENTS

It would be impractical to adequately recognize all the people who have been instrumental to my studies and explicitly on this mini-dissertation. I sincerely thank you for all your support and reassurance throughout the study period.

I thank my Heavenly Father, for being Faithful and for the gift of life in abundance, courage, strength and wisdom to pursue the study and contribute to the body of knowledge. It is indeed an honour and privilege to achieve this milestone.

I extend a gesture of thankfulness to my wife, Mmarona Mmabatho, for her tolerance, devotion, perpetual backing, reassurance and consolation when the coursework temperature and pressure was unbearable, when determination to forge ahead was at a minimum, she was there by my side. My children Kerapetse, Matlotlo, Tshiamo and Khumo, for permitting me to pinch their time and joyfulness around me and prioritise studies, their understanding, tolerance and commitment to one another when daddy was lost with assignments, deadlines and persistently burning the midnight oil. I don't have enough diction to express my love and gratitude for you. I honestly and sincerely dedicate this dissertation to you. I also challenge you, to do better than daddy because I will be on your side every step of the way.

I extend my gratitude to my beloved mother, Mokgadi Mary, for her untiring prayers, empathy and sustenance when I was unreachable for important family commitments, gatherings and or ceremonies due to my academic schedule overlapping into weekends most of the times. My mother-in-law Meriam, for her preparedness to babysit, her assistance with the housekeeping chores whenever the studies required and my wife was unavailable due to work commitments to care for the family.

My elder brother, Paul, for his encouragement to pursue this course, for covering up my family shortcomings and representing my views on important matters. I didn't know what you got me into but thank you for the baptism. My Dad, Sanana Jonas whom I have wished he lives long enough to witness the day I complete my studies. His lifetime sacrifices and selflessness to see not only his children succeed and achieve better things in life not through short cuts, favours but hard work, honesty, diligence and truthfulness

has been a source of great inspiration in my life. Despite him not accorded an opportunity to finish school by his family after the passing of her mother, he did the most to push his siblings and his children through school, for your sacrifices together with my mother Mokgadi, I salute you today and share this achievement with you. If it wasn't for you, I would not have come this far. It is my way of appreciating all your teachings and guidance from childhood, I reward your efforts with this certificate and share this pedestal with you.

My only sister Matshidiso Mokgadi and her children, Dibata, Michael, Mohau for showing their appreciation for all my wife has done for and been to them. I know how much it means to her to have them as family. The best you can do for me, is to embrace education for yourselves, work hard and know that my wife is very proud of you. Don't disappoint her, ke Mma-Malome wa lona, you will know one day what that role means in your stages of life.

To my school and family friends (Nhlanhla Kraai, Eddie Mohlakoane, Nomalanga Mosala, Thabang Khutsoane, Moroka Kaotsane, Dondo Mogajane, Minah Maredi, Peggy Goba, Meneer Dumile Moyo, Nelly Chilufya, Thembi Sibande, Dr David Moeketsi etc) and work colleagues (Thulani Mdakane, Gugu Chabalala, Thamsanqa Ngwenya, Dr Tom Zhuwau, Peter Netshipale, Dr Moshe Swartz, etc), I salute you all. I celebrate your trustworthiness, thoroughness, allegiance and the love you shown me and for our people. It has been the highest honour of my career to have served in public office with you, I appreciate the journey to arrive at this point.

To my principals and leaders, who have bestowed me an opportunity to serve, I salute DD Mabuza (Deputy President of the Republic of South Africa and of the African National Congress) and his collective across all spheres of government for honouring me with a privilege to serve my country in a time such as this one.

To my commanders and comrades (General Langa, Deputy Secretary General of the ANC, Jessie Duarte, Yasser Splinters, Dr Thulare, Tumi Rabanye, Joseph Thamae, Banzi Vacu, Reginaldo Fernando, etc), I remain indebted to you and committed to the struggle and service to Africa! Long Live! To my business associates, I salute Mduduzi Moyo, Matladi Lesufi, Chrissy Moropa, Mesela Nhlapo, Molefe Mokgatle and many of you I cannot exhaust for consenting to conduct business with you, for encouraging me to

endure and complete the coursework especially when my strength to forge ahead and resources had run out. You have been my light and courage when all was gloom. I hope this milestone will cement our business relationships and add value to the opportunities we have pursued thus far. I wish to thank my supervisor, Dr Spiwe Masarira to have overseen my work. It has not been an easy journey to this point. Had it not been for you, I would have given up on this assignment. Indeed, you embraced me and for that I am eternally grateful.

DEDICATION

Isaac Thipe Mmethi. Kwena, this is for you, my brother. For the time of your life and the life of your time! May your soul Rest in Peace. Long Live Cde Thipe!

Dr. Bomo Edith Edna Molewa (the first Vice-Chancellor of Sefako Makgatho Health Sciences University and Former South African Minister of Water and Environmental Affairs). This is your tribute from me, Rakgadi. Robala ka Kagiso, Kwena! Motlhaloga! Mbokodo! In your honour, I will encourage the family tradition of New Year's lunch to continue to keep the family bond intact.

Harry M. Molamu. This is in your memory my friend, brother and comrade! May your soul rest in Peace. Comrades and friends for life. Long Live!

ABSTRACT

The lack of basic municipal service delivery notwithstanding resources being made available annually to local municipalities raises a likelihood of managerial capital deficit which probably limits sustainable service delivery. The study is sought to look into the influence of managerial capital on sustainable service delivery within local municipalities in South Africa. Secondary data from various publicly available municipal reports was used and a quantitative study (guided by Cobb Douglas production function) was applied in order to determine the structural configuration of managerial capital as well as the magnitude and direction of the contribution of each managerial capital component to enhance service delivery. A total of six (6) local municipalities were considered in the study and included Thembisile Hani, Dr.J.S. Moroka, Elias Motsoaledi, Ephraim Mogale, Emfuleni and Madibeng.

The study identified four (4) managerial capital components that included knowledge management, municipal resource planning, financial management and corporate governance. Factor analysis showed that financial management and corporate governance are the most critical components that drive sustainable service delivery within local municipalities under study. Correlation analysis indicated that financial management and service delivery had a positive but weak ($r= 0.185$; $p > 0.05$) association. Corporate governance and service delivery demonstrated positive and restrained ($r= 0.216$; $p > 0.05$) association. On the other hand, financial management and corporate governance demonstrated a positive and moderate ($r= 0.334$; $p < 0.1$) association.

Using the Cobb Douglas production function, financial management had the highest input share (alpha value) of 82.8% while corporate governance had an input share(beta) of 17.2%. This meant that financial management had a dominant impact in driving

sustainable service delivery within municipalities and therefore needed to be prioritised more in order to boost service delivery.

The study recommends that there is a need to priorities and align financial management systems to service delivery outcomes in order to optimise performance in local municipalities, the need to have effective corporate governance systems such as systems, processes, and procedures to achieve compulsory disclosure of conflicts of interest, public participation, accountability and transparency in the discharge of the municipal mandate to citizens.

The study further recommends that all the above should not just be done for compliance purposes but should be integrated into mandatory key performance management objectives as well as key performance indicators for employees of municipalities across all levels.

TABLE OF CONTENTS

DECLARATION OF ORIGINAL WORK.....	i
ACKNOWLEDGEMENTS.....	ii
DEDICATION.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS	viii
ABBREVIATIONS.....	xiii
LIST OF FIGURES	xv
LIST OF TABLES.....	xvi
CHAPTER 1: BACKGROUND OF THE STUDY	1
1.1 Introduction	1
1.2 The Sphere of local government in South Africa.....	3
1.3 The degree of freedom for municipalities in South Africa	6
1.4 Components of MC used in the study	8
1.5 Problem statement.....	8
1.6 Main aim and objectives of the study	9
1.6.1 Aim of the study.....	9
1.6.2 Objectives of the study	9
1.8 Hypothesis of the study	10
1.9 Significance of the study	10
1.10 Justification of the study.....	11
1.11 Importance of the study	11
1.12 Benefits of the study	12
1.13 Delimitation of the study.....	12
1.14 Limitations of the study	13
1.15 Research design and methodology	14

1.16	Organisation of the study	15
CHAPTER 2: LITERATURE REVIEW		16
2.1	Introduction	16
2.2	Section A: Critical Analysis and Evaluation of Existing Knowledge	17
2.2.1	The concept of Human Capital (HC).....	17
2.2.2	Application of HC theory in public policy.....	18
2.2.3	Conceptualization of HC theory	18
2.2.4	Historical roots of human capital theory.....	19
2.2.5	Application of human capital theory	20
2.2.6	Contemporary human capital theories	21
2.2.7	Significance of HC theory	22
2.2.8	The features of human capital	23
2.2.9	Organisational performance.....	24
2.2.10	Human capital and organisational performance	24
2.2.11	The concept of Managerial Capital.....	25
2.2.12	Functions of managerial capital.....	26
2.2.13	Performance measurement	28
2.2.14	Factors of production, a concept of macroeconomics	29
2.2.15	Influence of managerial capital components	35
2.2.16	Overview of the state of public service delivery.....	37
2.2.16 (a)	Service delivery	37
2.2.16 (b)	Local government sphere	37
2.2.16 (c)	Municipal integrated development planning (IDP)	38
2.2.16 (d)	Support structures for municipalities.....	38
2.2.17	Conceptual and methodological framework	40
2.2.18	Measures of municipal capital	41

2.2.19	Gap in the literature	43
2.3	Section B: Overview of municipalities in the study population	43
2.3.1	Introduction	43
2.3.2	Overview of Madibeng Local Municipality	43
2.3.2	(a) MLM financial performance results.....	44
2.3.2	(b) MLM service delivery performance outcomes	45
2.3.3	Overview of Ephraim Mogale Local Municipality	49
2.3.3	(a) EpMLM financial performance results	50
2.3.3	(b) EpMLM service delivery performance outcomes	51
2.3.4	Overview of Dr. JS Moroka Local Municipality.....	55
2.3.4	(a) DrJSMLM financial performance results.....	56
2.3.4	(b) DrJSMLM service delivery performance outcomes.....	57
2.3.5	Overview of Elias Motsoaledi Local Municipality	61
2.3.5	(a) Elias Motsoaledi municipal financial performance results	62
2.3.5	(b) EMLM service delivery performance outcomes	63
2.3.6	Overview of Thembisile Hani Local Municipality (THLM).....	67
2.3.6	(a) THLM financial performance results.....	68
2.3.6	(b) THLM service delivery performance outcomes	68
2.3.7	Overview of Emfuleni Local Municipality (ELM).....	72
2.3.7	(a) ELM financial performance results	73
2.3.7	(b) ELM service delivery performance outcomes	74
2.4	Combined Conclusions from Section A and B	78
CHAPTER 3– RESEARCH METHODOLOGY		82
3.1	Introduction	82
3.2	Research methodology	82
3.3	Research design	83

3.4	Sample population of the study	84
3.5	Purposive sampling	85
3.6	Data collection.....	86
3.7	Data analysis.....	86
3.8	Limitations of the study	87
3.9	Ethical considerations in the research	88
3.10	Conclusion	88
CHAPTER 4 – PRESENTATION OF RESULTS AND FINDINGS		90
4.1	Introduction	90
4.2	Results and Findings of the study.....	91
4.2.1	Factor analysis.....	91
4.2.2	Preliminary analysis.....	95
4.2.3	Inferential analysis of data	99
4.2.4	Multiple linear regression.....	101
4.3	Conclusion.....	103
CHAPTER 5 – ANALYSIS AND DISCUSSION.....		122
5.1	Introduction	122
5.2	Discussion of findings	122
5.2.1	Discussion on Objective 1	122
5.2.2	Discussion on Objective 2	123
5.2.3	Discussion on Objective 3	123
5.3	Conclusion	124
CHAPTER 6 - CONCLUSIONS AND RECOMMENDATIONS.....		125
6.1	Introduction	125
6.2	Conclusion	125
6.3	Recommendations	125

6.4 Areas for further research	126
REFERENCES	128

ABBREVIATIONS

<u>LIST OF ABBREVIATIONS / ACRONYMS</u>	
HCT	Human Capital Theory
MC	Managerial Capital
SSD	Sustainable Service Delivery
FY	Financial Year
RDP	Reconstruction and Development Programme
GEAR	Growth, Employment and Redistribution Strategy
NGP	National Growth Path
ASGISA	Accelerated and Shared Growth Initiative of South Africa
MPG	Mpumalanga Provincial Government
AGSA	Auditor General of South Africa
GGAR	Good Governance Africa Report
SADC	Southern African Development Community
MIG	Municipal Infrastructure Grant
EPWP	Expanded Public Works Programme
MSA	Municipal Systems Act 117 of 1998
MFMA	Municipal Finance Management Act 56 OF 2003
IRM	Integrated Risk Management
CG	Corporate Governance
KM	Knowledge Management
MP	Municipal Planning
SDBIP	Service Delivery Business Implementation Plan
HCE	Human Capital Economics
CLU	Certified Life Underwriter
SSD	Sustainable Service Delivery
TFP	Total Factor Productivity
MC	Managerial Capital

IDP	Integrated Development Plan
AGSA	Auditor General of South Africa
SDBIP	Service Delivery Business Implementation Plan
MTEF	Medium Term Expenditure Framework
KSO	Key Strategic Objectives
KPA	Key Performance Areas
KPI	Key Performance Indicators
TRC	Transitional Rural Council
TLC	Transitional Local Council
SDM	Sekhukhune District Municipality
BDM	Bojanala District Municipality
MLM	Madibeng Local Municipality
EMLM	Elias Motsoaledi Local Municipality
DRJSMLM	Dr. J.S. Moroka Local Municipality
ELM	Emfuleni Local Municipality
THLM	Thembisile Hani Local Municipality
EMLM	Ephraim Mogale Local Municipality
SONA	State of the Nation Address
NDM	Nkangala District Municipality
DoCOGTA	Department of Cooperative Governance and Traditional Affairs
DRA	Division of Revenue Act 5 of 2015
LGA	Local Government Association
UNDP	United Nations Development Programme
MM	Municipal Manager
CFO	Chief Financial Officer
SALGA	South African Local Government Association
NDP	National Development Plan

LIST OF FIGURES

Figure 2. 1: Ephraim Mogale Local Municipality (adopted from Ephraim Mogale Local Municipality Integrated Development Plan, 2016/17).....	50
Figure 2. 2: Dr. S Moroka Local Municipality (Source: Dr JS Moroka Local Municipality Integrated Plan, 2016/17).....	56
Figure 2. 3: Elias Motsoaledi Local Municipality (Adopted from Elias Motsoaledi Local Municipality Integrated Development Plan, 2016/17).....	62
Figure 2. 4: Thembisile Hani Local Municipality (adopted from Thembisile Hani Local Municipality Integrated Development Plan (2016/17).....	67
Figure 2. 5: Map of Emfuleni Local Municipality (adopted from Emfuleni Local.....	73
Figure 5. 1: Variable loadings along component scale.....	95
Figure 5. 2: Service delivery performance of local municipalities.....	96
Figure 5. 3: Financial Management performance of local municipalities.....	97
Figure 5. 4: Corporate Governance performance of local municipalities	98
Figure 5. 5: Knowledge Management performance of local municipalities	99

LIST OF TABLES

Table 2. 1: Summary of Auditor General’s Reports 2018/19.....	45
Table 2. 2: Madibeng Local Municipality Service Delivery Outcome.....	45
Table 2. 3: Summary of Auditor General Reports (2018/19).....	51
Table 2. 4: Ephraim Mogale Service Delivery 2015-2020 Overview	51
Table 2. 5: Auditor General’s Reports (2018/19).....	57
Table 2. 6: Dr. J. S. Moroka Service Delivery Summary 2013-2018).....	57
Table 2. 7: Auditor General Reports Overview 2018/19)	62
Table 2. 8: Elias Motsoaledi Local Municipality Service Delivery Overview.....	63
Table 2. 9: Thembisile Hani Local Municipality Auditor General Reports Overview	68
Table 2. 10: Thembisile Hani local Municipality Service Delivery Overview (2015-2020)	68
Table 2. 11: Auditor General Reports (2018/19)	74
Table 2. 12: Emfuleni Local Municipality Integrated Development Plan	74
Table 5. 1: KMO and Bartlett's Test of sphericity	91
Table 5. 2:Correlation analysis to determine association between variables of the study	93
Table 5. 3: Determination of critical factors using total Variance explained	94
Table 5. 4: Determination of critical factors using factor loadings	94
Table 5. 5: Test of Homogeneity of Variances	100
Table 5. 6: Comparisons of municipalities using ANOVA Error! Bookmark not defined.	
Table 5. 7: Determination of relationship between variables using regression	102
Table 5. 8: Determination of alpha and beta coefficients	103
Table 5. 9: Determination of model adequacy using ANOVA	103

CHAPTER 1: BACKGROUND OF THE STUDY

1.1 Introduction

In the period between 1995-2020, the government of South Africa has seen two outstanding post-apartheid legislative achievements at local government level which have re-defined the course of public service delivery. Firstly, it was the proclamation of Section 40 (1) as well as Section 41 (1) of the Constitution of the Republic of South Africa (1996) (previously referred to as Act 108 of 1996) which declared local government as an autonomous sphere of government vis-à-vis the national and provincial spheres of government. (Constitution of the Republic of South Africa, 1996).

The second proclamations of Section 152 and Section 153 (1) of the Constitution of the Republic of South Africa (1996) sought “to promote social and economic development at local municipality level” as well as authorising municipalities to structure and manage their administration, financial budgeting and resource planning processes in such a way that priority is given to the delivery of basic municipal services (which includes water, sanitation, refuse removal, electricity and many others broadly addressed in this study) to the community. The two legislative achievements promulgated in the Constitution of the Republic of South Africa (1996) birthed the concept of developmental local government which highlighted the reputation that national government accredits to public service delivery at the local sphere of government. There is no doubt that the local sphere of government is therefore vital in its role of public sustainable service delivery to the citizenry.

Changes in the Constitution as discussed above led to the development of the White Paper on Local Government (WPLG) in 1998, which gave substance to the concept of developmental local government. The White Paper has considered the features of developmental local government, characterized a series of development outcomes and proposed several tools to assist municipalities to become developmental (RSA, 1998:17).

However, the study argues that the two legislative pieces highlighted and the supportive structures established remain as ‘White Elephants’ unless fitting Managerial Capital (MC) is engaged for actualisation of sustainable service delivery at the local governance sphere. MC is defined by Bloom,

McKenzie and Roberts (2010) as business skills that are considered as one of the drivers of organisations' growth and determine efficiency of the organisation. The term 'organisation' in this study would generally refer to local municipalities in South Africa but more specifically the category B's enlisted in the study.

The study analyses the influence of MC on SSD in local government with particular focus on six (6) municipalities. Two of which are in Nkangala District in the Province of Mpumalanga (viz., Thembisile Hani & Dr.J.S. Moroka Local Municipalities), two from Sekhukhune District.in Limpopo Province (viz., Elias Motsoaledi & Ephraim Mogale Local Municipalities), while the last two are representing Sedibeng District of Gauteng Province (viz., Emfuleni Local Municipality) and Bojanala District (namely, Madibeng Local Municipality) respectively. Although provinces such as Mpumalanga Province with its rich heritage, agricultural lands, mineral deposits and energy sources, represents the Agriculture-Mineral-Energy Complex of the country, Mpumalanga is largely considered a predominantly rural province together with Limpopo and North West according to the Community Survey Report 2016 (Statistics SA, 2016).

Development and endeavours to deliver mandated municipal services, such as, clean running water, electricity, refuse removal and sanitation whose objective is meant to restore dignity of the majority of South Africans in post-apartheid democratic dispensation is a strategic pursuit undertaken by the government of South Africa. High levels of inequality, unemployment and poverty across rural communities have had indirect consequences on municipal revenue generation capacities including their strategic intent to accelerate public service delivery.

In this regard Monkam (2016) noted that even though rural local municipalities are making efforts to provide essential services to the citizens, South Africans have been experiencing an increasing displeasure with service delivery at the local level. He also observed that South African local municipalities are branded by substantial service delivery backlog challenges, geographical spreading of rural municipalities in the main, poor financial management, lapse of corporate governance systems, political instabilities across municipalities, exploitation of supply chain processes, and insufficient skills in critical municipal functions. Such challenges are more noticeable in local rural municipalities and confirmed by the 2019 Auditor General's Report on Municipal Performance Audit Outcomes.

The background of the study illustrates some of the complications that South African municipalities in general navigate and rural municipalities in particular encounter in their pursuit to dispense basic municipal services to the citizens. It is the context which underpins the study.

1.2 The Sphere of local government in South Africa

The transformation agenda that is encouraged by the Constitution of the Republic of South Africa (1996), provides for three (3) categories of municipalities. Through the Municipal Structures Act 117 of 1998, the Constitution of the Republic of South Africa (1996) comprises of norms and standards to determine at what point an area qualifies to have a category A municipality (metropolitan municipalities) and when municipalities fall into category B (local municipalities) or C (district municipalities). The focus of this study is on category B municipalities.

Madumo (2012:44) observed that the role and functions of municipal governance are predominantly to create an environment for efficient and effective service delivery to communities. Madumo's (2012) observation concurs with the Constitution of the Republic of South Africa (1996) which has recorded that the key role of municipalities is to deliver services such as portable water, waste removal, sanitation and electricity to the citizens. Sustainable service delivery (SSD) through effective MC at local municipalities that hinges this study.

The Constitution of the Republic of South Africa (1996) advocates for citizens' participation in public service delivery / performance in local government. The Constitution of the Republic of South Africa (1996) and Local Government Key Legislations (1994-2015) define public participation as partaking by citizens in political decisions, design and implementation of policies that affect their lives, rather than via elected representatives as well as the ability of municipalities' corporate governance to involve citizens in matters of service delivery.

The study is also informed by Local Government Key Legislations (1994-2015) which calls for establishment of internal governance systems in municipalities. All the other pieces of legislation that have a bearing on the corporate governance of municipalities will be used in this study to identify variables that will be measured and analysed in this study. Such pieces of legislations relevant in

the space of local government include Public Finance Management Act (PFMA), Municipal Finance Management Act (MFMA) 56 of 2003, Local Government Municipal Structures Act 117 of 1998 (LGMSA), Municipal Systems Act 32 of 2000 (MSA), Traditional Leadership and Governance Framework Amendment Act 41 of 2003 (TLGFAA), Division of Revenue Act 5 of 2015 (DRA).

In all these pieces of legislation the study seeks to identify input variables that make up MC and what according to pieces of legislation is required from such MC. The study will also identify output variables in the form of various forms of indicators that represent mandatory municipal services to be dispensed to the citizens.

Stytler and De Visser (2007:1-3) and Madumo (2012:41) observed that the South African Local Government (SALG) is a vital part of the countries' constitutional system of a re-organised government that was inaugurated after the first democratic elections of 1994. SALG carries a primary mandate to reverse the inscription created on South African human settlements as well as on municipal institutions by the apartheid legacy. SALG has to further inspire development and change in a democratic setting through application of the development guidelines as stipulated in the Municipalities Systems Act of 1988.

Cloete and Thornhill (2005: 102) argues that through the Municipal Systems Act of 1998 the Constitution of South Africa (1996) is the supreme law that spells out guidelines which controls functions that all municipal structures need to perform in order to dispense public service delivery. They have further observed that local government is a separate and distinct sphere of government sanctioned to dispense public services at local level with oversight of both the provincial and national spheres. The weight on structured support has further been promulgated in Section 139 of the constitution which gives provincial government authority to intervene in local government affairs in cases of administrative collapse, disruptive unrests, powerlessness by a local municipality to render public services.

Putu (2006:16), Cloete and Thornhill (2005:102) concurred that municipalities are encouraged to promote resident harmony through developing plans and instruments that constantly engage with citizens across all the social configurations. Legislation hence provides for the suitable division as well as devolution of power, which ensure that applicable regulations administering the running of

municipalities are observed. This view was also held by Stytler and De Visser (2007) who argued that since 1994, municipalities have been lawfully organized to be people-centred and answerable to the goal of dispensing impartial services to all citizens.

This is a paradigm shift from their original intent, of historically servicing only white communities within their municipal boundaries. For illustration, in terms of the Group Areas Act of 1959 (which is now repealed), blacks were not permitted to reside in areas designated for white people. Since the dawn of democracy in 1994, this legislation has since changed and black people are free to live wherever they please and vice versa.

However, the Department of Cooperative Governance and Traditional Affairs (DoCOGTA), Report of 2009 titled 'The Overall State of Municipalities in South Africa', emphatically described the overall state of municipalities as not pleasing nor reassuring. The 2009 report is further validated by the recent 2019 AGSA reports on the overall performance outcomes of local government wherein the Auditor-General published municipal audit results under the theme - "not much to go around, yet not the right hands at the till", to mirror the state of financial management in local government. In his last local government general report, the AG portrayed an unattractive picture of billions of rand in funds assigned to municipalities being administered "in ways that are divergent to the conventions and accepted accounting disciplines". The AG firmly cautioned that these managerial and oversight lapses "make for very weak answerability and the subsequent exposure to exploitation of the public purse".

The report has underlined that notwithstanding the successes achieved in the evolution of local government legislative transformation programme as advocated by the Constitution of 1996, participatory democratic approach to local development, lawfully structuring municipalities to be people-centred and answerable, there continues to be vast inconsistencies within and across municipalities, be it in terms of geographic location of a municipality (urban versus rural), landscape, service delivery performance, capacity (whether human, capital, institutional and financial resources), politically and or economically.

The report also identifies that since municipalities also need funding to function effectively, the Constitution of The Republic of South Africa (1996) has promulgated Municipal Finance Management Act 56 of 2003 (MFMA) as a statutory framework to control the financial matters of all

municipalities, match the municipal budget with the Integrated Development Plan (IDP) as well as the Service Delivery Budget and Implementation Plans (SDBIP). Lawfully, municipalities are given capacity to plan public service delivery priorities and interventions on a five-year (5) cycle through a public participation process known as the IDP.

All of these provisions are meant to enable transformation and promote the delivery of public services (Mkhonta 2007:108–109) and consistency in harmony with the treasury norms and standards (SALGA 2006:5), to boost participatory democracy in local government. The report concludes that in South Africa, regardless of category a municipality finds itself in, they have a constitutional obligation to dispense basic municipal services such as portable water, waste removal, sanitation and electricity to the citizens in their respective jurisdictions. The researcher intends to explore in the study how MC influences the municipalities on this constitutional mandate.

Despite all the inconsistencies identified and the interventions introduced in local government to respond to the challenges of public service delivery, MC within and across municipalities has not been investigated sufficiently by researchers to determine its influence whether positive or negative on public service delivery to this point. The Good Governance Africa Report (2019) only records that public service delivery / performance of local municipalities is the gauge of South Africa's level of citizen engagement.

The Constitution of the Republic of South Africa records that South Africa (1996) is a unitary state, municipalities and provinces have their own limited independence however, the existence of the local sphere of government is intended to safeguard equitable dispense of municipal services and to further promote the general well-being of the people within the municipal jurisdiction. It is in this context that MC generated an interest for enquiry.

1.3 The degree of freedom for municipalities in South Africa

Van der Walt (2015:20) record that in the South African system of cooperative governance, the local sphere of government is co-dependent on the provincial and national spheres. National government is responsible to create a broad national framework for development, including policies and sectoral

programmes Secondly, provincial sphere of government enables, scrutinises and directs the execution of sectoral programmes, such as water provision. The provincial sphere of government is also answerable for municipal oversight and support and may intervene in the affairs of a municipality if it cannot observe its constitutional mandate or cannot or does not fulfil an executive compulsion in terms of legislation (Van der Waldt 2015:20).

Local government translates into reality the national and provincial programmes in agreement with several non-governmental agencies and the private sector. Since local government is the closest sphere to the people and interacts daily with communities, specific emphasis is generally placed on its developmental service delivery role (Van der Waldt 2015:20). The system of cooperative governance furthermore enables the mixing and configuration of development endeavours on all the three spheres.

On the national level, the government's Programme of Action, which is delivered through the State of the Nation Address (SONA), and written in the National Development Plan (NDP) Vision 2030 create an all-embracing agenda for the development of provincial Growth and Development Strategies as well as the sectoral plans (Van der Waldt 2015:20).

Municipalities, in turn, are answerable to align their Integrated Development Plans (IDP's) with provincial growth and the NDP priorities. Various instruments to simplify inter-governmental relations furthermore direct these interfaces (Van der Waldt 2015:20). The Constitution of 1996 affirms the role and functions of municipalities (Chapter 7 of the Constitution, 1996).

In South Africa, it becomes difficult to regulate the degree to which the operational functioning of the municipalities permits for them to be entirely autonomous. The White Paper on Local Government (1998) has recorded that the local government sphere is identified as an establishment that exists and is not a sub-function of national and provincial governments.

According to the Division of Revenue Act 5 of 2015 (DRA), the self-sufficiency of municipalities to operate as structures prevailing on their own is compromised by the honour bestowed upon national government to collect national revenue annually and distribute it to the other spheres of government. However, the complete freedom of municipalities is limited in terms of the Constitution of the

Republic of South Africa (1996), which dictates that municipalities have the right to manage their own affairs as prescribed by the national and provincial legislations.

1.4 Components of MC used in the study

From the review of various pieces of legislation variables that are directly linked to MC and that hinge this study as determinants of output (sustainable service delivery) include Corporate Governance (CG), Integrated Risk Management (IRM), Municipal Resource Planning (MP), Municipal Finances (MF) also referred to as Financial Management (FM), Project Management (PM), Intergovernmental Relations (IGR), Public Participation (PP) and Knowledge Management (KM). These variables are identified in the study as independent variables which will be discussed further in the literature review in Chapter 3

1.5 Problem statement

Notwithstanding the many democratic gains achieved in post-apartheid South Africa over twenty-seven (27), many rural communities across South Africa for example in the provinces of Eastern Cape, KwaZulu Natal, Limpopo, Mpumalanga and North West respectively continue to be branded by the tripple challenges of poverty, joblessness and disproportion.

Despite all the efforts made by the post-apartheid South African government to address public service delivery in rural areas of the country, human capital development, in particular MC at the local sphere of government is not perceived a priority in the list of interventions executed to confront these difficulties.

The lack of basic municipal service delivery despite resources being made available annually to local government entrenches the problems of lack of infrastructure and sharply raises a possibility of MC deficit which probably limits the growth potential of rural communities. Efforts to extend the provision

of basic public services such as refuse removal, sanitation, electricity and water to all the people remain slow and often intolerable to reach most informal settlements and rural communities.

While there have been outcries related to service delivery and mostly characterised by violent protests in certain communities, there has been little effort to solicit for an empirical grounded solution to sustainable service delivery related problems. The annual Treasury Reports, Auditor General Reports and Statistics South Africa Reports have suggested that there are problems embedded in MC of local rural municipalities but less attention has been given to the relationship of MC in local municipalities which many are mainly rural and sustainable service delivery.

The study seeks to explore the association that exists between MC and sustainable service delivery and also provide structural configuration on how service delivery responds to changes in individual MC components or entities. Such empirically grounded insights might be part of future solutions to the broad rural local municipalities' endeavours to dispense critical services to its citizens.

1.6 Main aim and objectives of the study

1.6.1 Aim of the study

The main objective of the study is to establish the influence of MC on the provision of basic services by local municipalities of South Africa.

1.6.2 Objectives of the study

The objectives of the study are;

- To examine the structural configuration of managerial capital that yields enhanced service delivery outcomes in local municipalities in South Africa
- To establish the association between managerial capital and sustainable service delivery in local municipalities in South Africa

- Ascertain the magnitude and direction of the contribution of each managerial capital component to enhance service delivery within local municipalities in South Africa

1.7 Research questions

1.7.1 Primary research question

How does MC influence the provision of basic services by local municipalities of South Africa?

1.7.2 Secondary research questions

- What is the structural configuration of managerial capital that yields enhanced service delivery outcomes in local municipalities of South Africa?
- What is the association between managerial capital and sustainable service delivery in local municipalities of South Africa?
- What is the magnitude and direction of the contribution of each managerial capital component to enhance service delivery within local municipalities of South Africa?
- What recommendations could be provided to improve sustainable service delivery?

1.8 Hypothesis of the study

H₀: MC does not predict sustainable service delivery in local municipalities of South Africa

H₁: MC predicts sustainable service delivery in local municipalities of South Africa

1.9 Significance of the study

The study is envisaged to making a contribution to the field of Public Service & Administration, Local Government Administration alike via an evaluation model that will determine the correlation between

MC and SSD. The study is also envisaged to contribute to the body of knowledge in as far as the role of MC in local government service delivery is concerned.

Students, policy makers and practitioners in the fields of development studies and public administration will use the study as reference for future research. Lastly the study is envisaged to contributing to academic research. The study will keep its importance to rural municipalities across the local government landscape. As such, both government institutions and research scholars can exploit the study to further their academic research.

1.10 Justification of the study

The outcomes and findings of the study will provide a foundation for future empirical studies on MC in South African local municipalities.

1.11 Importance of the study

To put this matter into perspective, up to this point in the literature review, no one (at least as far as I can tell from the literature review conducted) has tested the relationship between Managerial Capital (MC) and Sustainable Service Delivery (SSD) in municipalities. This observation therefore, makes this proposed study significant to consider. In the main, the AGSA reports reveal that the revenue base of municipalities across the country and rural municipalities in the main, continues to be antagonized with the culture of non-payment of municipal services delivered, lack of competent officials in financial management roles of the municipality, flouted supply chain processes and weak accountability instruments. According to the AGSA report (2019), the culture of non-payment has exhausted the revenue base of many municipalities.

Whether a particular municipality is an obstacle or a catalyst to local development depends largely on the quality of leadership the Executive Mayor and Municipal Council provide, improving the skills and competencies of the officials employed (Managerial Capital) in the municipality, improving compliance (whether there are problems with corruption and maladministration), and utilising

municipal resource planning (whether the municipality mobilises and utilises the resources available to it) effectively.

In numerous rural communities, municipalities need to find ways of optimising their Managerial Capital in working co-operatively with communities & traditional authorities to prepare sound Integrated Development Plans (IDP's), maintain urban and rural roads infrastructure, facilitate appropriate land use management, attract investments into the local areas, manage integrated municipal risk, prioritise the dispensing of basic municipal services, including collection of rates from non-poor households as well as from businesses located on traditional land within the municipal jurisdiction.

1.12 Benefits of the study

The researcher's interest in the study is to examine the correlation between Managerial Capital (MC) and Sustainable Service Delivery (SSD) at the six (6) municipalities respectively. It is hoped that the study will highlight the positive or negative influence of Managerial Capital (MC) in the local municipalities to Sustainable Service Delivery (SSD). The study also hopes to draw a relationship between the known input production factors from literature (which includes labour, land, capital and entrepreneurship) and intervening variables influencing Sustainable Service Delivery (SSD) through indicators such as accountability, compliance, corporate governance, financial management, delivery of basic services, and building institutional and administration capability.

The researcher's view is that the outcome of such an examination will reveal a valuable body of knowledge to the benefit of all municipalities respectively. The study could present a baseline for future research of MC and SSD in other municipalities around the country.

1.13 Delimitation of the study

The investigation focuses on Category B local municipalities within a radius of 160 kilometres from Pretoria, Gauteng Province. A total of six (6) local municipalities were considered and these included

Thembisile Hani, Dr.J.S. Moroka, Emfuleni, Madibeng, Elias Motsoaledi and Ephraim Mogale. Secondary data was gathered for a five-year period between 2013/14 and 2017/18 financial period.

1.14 Limitations of the study

The study was constrained by the following issues;

- (a) **Sample size:** the number of the units of analysis used in the study is informed by the type of research problem under investigation. Only six (6) local municipalities participated in the study. This translates to a total of 30 data points which is the minimum requirement for normality.

- (b) **Lack of available and/or reliable data:** a lack of data or of reliable data for periods 2012-2015 will limit the scope of analysis, the size of the sample, and this might be a significant obstacle in finding a trend and a meaningful relationship. The data required may not be as accurate as the current data since National Treasury was not so strict on municipalities at the time;

- (c) **Lack of prior research studies on the topic:** reliant on the scope of the research topic, there is little, if any, prior research on MC and SSD. The librarian was not conclusive in lack of prior research; it may be required in the future. For example, using an exploratory rather than an explanatory research design. The researcher is aware that this limitation can serve as an important opportunity to motivate for future research studies.

- (d) **Sources of the data:** the reports of previous financial years audit outcomes (2015/16 and 2016/17) from Provincial Treasuries pertaining the six municipalities, will be reviewed in order to identify gaps in the execution phases. The reviews will be done in conjunction with prescriptive service delivery performance guidelines.

National Treasury Performance Handbooks and or Standards for Infrastructure Delivery and Management Articles relevant to the role of MC and local government SSD performance measurement or indicators will be studied with a view to finding deficits in both theory and practice. The questionnaire data collection techniques are not earmarked to be used in the study.

1.15 Research design and methodology

The proposed study will take the form of a case study covering six (6) local municipalities in and around Gauteng province. The study will make use of a quantitative research approach. It is proposed that the quantitative data will be sourced from secondary data sources that include annual reports, service delivery business implementation plans, audited financial statements, IDP, MFMA consolidated general reports.

The study is guided by the Cobb Douglas production function of the form;

$$Q = A \cdot [L^\alpha \cdot K^\beta] \dots\dots\dots(1)$$

Where;

Q is the quantity of products.

A is a positive constant (Called Total Factor Productivity),

L is the quantity of labor,

K is the quantity of capital,

α is the output elasticity of capital,

β is the output elasticity of labor,

α and β are constants between 0 and 1.

Statistical Package for Social Scientists (SpSS) will be used to analyse secondary data to determine the structural configuration of MC as well as the magnitude and direction of the contribution of each managerial capital component to enhance service delivery within local municipalities in South Africa.

1.16 Organisation of the study

The proposed study will be divided into six (6) chapters.

Chapter One (1) will explore the introduction to the study, problem statement, general objectives, specific objectives of the study, hypothesis of the study, justification of the study, limitations of the study, theoretical framework, research design, methodology, and organisation of the study.

Chapter Two (2) focuses on the Literature Review with emphasis on various contributions on the evolution of human capital by scholars including secondary literature on Local Government in South Africa which aims to provide an overview of all the six (6) local municipalities under observation. In particular, the municipal capacity assessment reports and service delivery outcome indicators relevant to the study. Key focus will be on topics covering human capital development, knowledge management, managerial capital and service delivery in rural municipalities of South Africa.

Chapter Three (3) will address the research design and methodology parameters which include amongst others the research approach, data collecting techniques as informed by the approach, sampling and data analysis applicable to the research project.

Chapter Four (4) addresses results and findings of the study on the influence of MC on service delivery within local municipalities in South Africa.

Chapter Five (5) deals with analysis and discussion of the results on the influence of MC on service delivery within local municipalities in South Africa.

Chapter Six (6), which is the last chapter, draws conclusions and recommendations of the study which are guided by the overall findings of the study.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chapter Two (2) is divided into Section A and B. The predominant objective of Chapter Two (2), Section A is a critical analysis and evaluation of existing knowledge relevant to this research problem. In an attempt to comprehend the objective, section A of chapter 2 examine if there exist any direct or indirect evidence in literature to validate and or confirm the relationship between MC and SSD. The enquiry extracted different kinds of information from literature with an intention to show the relationship between the different studies and how they relate to my study. Enquiry further sought to determine if similar literature did exist, if so, determine how similar or how different it was. The examination concluded by identifying gaps in the literature regarding MC and SSD.

Chapter Two (2), Section B is a continuation of the previous chapter which briefly described the population of the study as being six (6) municipalities of the Republic of South Africa. Section B of chapter 2 seeks to provide detailed synopsis of the municipalities that are part of the study population. Also provided in this section is the Auditor General's Reports that pertain to Municipal Financial Performance and the state of service delivery in the municipalities under study. Section B of chapter 2 laid a foundation for data collection through document analysis. The year range that the overview of an individual municipality is provided depended on the AGSA audit outcomes information provided.

The examination has drawn evidence from across the six (6) identified municipalities in relation to the status and quality of Sustainable Service Delivery (SSD), as well as the nature of the link between Managerial Capital (MC) and Sustainable Service Delivery (SSD) carried out by municipalities to communities they serve. To accomplish this task, the researcher attempted to answer the above questions systematically by methodically reviewing selected Human Capital theory literature and several related academic sources. In an effort to arrive at Managerial Capital (MC), which is the emphasis of the study, the researcher traced the foundation of human capital development, its evolution and influence into other forms of capital.

2.2 Section A: Critical Analysis and Evaluation of Existing Knowledge

The construct 'Managerial Capital' from the perspective of Human Capital theory is very well documented in literature. A thorough evaluation of its academic work from numerous authors in the field of development economics and public administration was commenced with an intention of bringing forth this construct and then relating it to Sustainable Service Delivery (SSD), to determine the nature of the relationship which may exist, if any.

Three (3) important aspects of HC theory have been considered in the formulation of the foundation to the study, and they included: historical roots of HC theory, conceptualization of HC theory and the application of HC theory. These aspects evolved into the concept of MC. The study focused on its functions and general applications as well as in the local government sphere, which represented the municipal environment highlighted in the study specifically.

2.2.1 The concept of Human Capital (HC)

According to Becker (2002) human capital refers to the knowledge, skills, creativity and health of the individuals in a business organisation. Weatherly (2003) expanded the definition of human capital components to include the peoples' life trades, knowledge, creativity, innovation, and energy, which they invest in their work. As described by Burund and Tumolo (2004) human capital involves investments in human resources. Human capital as described by Burund and Tumolo includes the development of individuals through facilitation of acquisition of new knowledge and skills (investments in human capital).

Okojie (2015) records that human capital represents the cost of investment in human resources in order to increase organization's efficiency. In this research human capital is considered knowledge, skills and abilities that human resources of municipalities have (Okojie, 1995) and it is assumed that the level of human capital in municipalities will determine its success towards improving SSD. Human capital is projected by Okojie as being an asset to an organization. Okojie (2015) suggests that there is need for a complete understanding of the features of human capital and how human capital relates to the aspirations of an organization. More specifically, MC as a subset of HC and

how it relates or influences SSD which is a priority mandate across municipalities, and also a key focus of this study.

2.2.2 Application of HC theory in public policy

To demonstrate the extent to which HC theory has been applied to topics in public policy, Huebner (1914), through his works founded the American College of Life Insurance from the University of Pennsylvania. He argued through the application of HC theory in public policy that the value of human life deserves to be treated in the same way as traditional capital is treated. He was honoured with a certificate as a Certified Life Underwriter for his work and an expert in ensuring the value of human life. It is out of Solomon Heubner's contribution that centuries later, the application of human capital theory was inspired to address many topics of public policy such as the power of nations, the effects of migration, regulation of safety, investments in health, economic development, education policy and investment, which remain the subject of HC theory today. Like all the sciences, human capital economics (HCE) is not immobile, but continues to evolve. At any point in time, it is the result of what has come before.

2.2.3 Conceptualization of HC theory

Kiker (1968) acknowledges that while the bona fide conceptualization of HC theory was expressed centuries ago, its development gained prominence during the 19th century. Kiker (1968) settles that Alfred Marshall, Adam Smith, Jean-Baptiste Say, John Stuart Mill and Irving Fisher have become the most prominent economists to address public policy topics of human capital theory in the 19th century.

Early economic viewpoints of Adam Smith concerning national wealth were published as far back as 1776. Mill (1848) pronounced that human abilities inseparably fixed in a person could not be practically counted as wealth while on the contrary Smith (1848) considered human abilities as economic utilities - means to wealth - liberally acknowledging all activities which lead to their improvement. Say (1803) supported the permissive position of Adam Smith, by affirming that overproduction of goods or services in one market will definitely return to equilibrium without

government intrusion as the producer will either fine-tune production to different items or adjust prices until the goods sell. However, Say (1803) disagreed with the labour theory of value by Adam Smith which had argued that the value of a product depends on the labour involved in its production. Say disagreed instead by arguing that value originates from its ability to fulfil the yearnings or necessities of the customer, (Irving Fisher, (1939)).

2.2.4 Historical roots of human capital theory

Sweetland (1996) records that, major methodological approaches and general reference to the historical development of HC theory can be traced as far back as 1776 to be exact. However, HC theory gained importance when the academic and experimental foundations of the field were acknowledged in the 1960's.

For example, Sweetland (1996) narrated that around 1691, the works of Sir William Petty demonstrated the authority of England when he decided to place a value on labourers in an effort to approximate the cost of lives lost as a result of wars and or other causes of deaths. Sweetland (1996) further narrated that his contribution was subsequently magnified by William Farr (1853) when he defined the present value of a person's net future earnings, which he called wealth. He argued that wealth, which referred to the present value of a person's net future earnings is expressed as earnings minus living overheads. He depicted wealth in the same way as physical property is denoted and argued that wealth ought to be taxed the same way as physical property is taxed.

Alternatively, Wittstein (1867), projected that Farr's present value of wealth could be used to ascertain reimbursements for claims involving bereavement. Farr's (1853) present value of wealth was given impetus by Wittstein. In 1930, literature suggest that the present value of wealth as promoted by Wittstein caught the attention and interest of Louis Dublin & Alfred Lotka. They applied the Farr's present value of wealth as depicted by Wittstein in the life insurance business to determine the amount of life insurance someone should purchase. It is their work that magnified Wittstein's present value of wealth to also cover mortality statistics.

Interestingly, the formula applied by Theodore Wittstein in 1867 as well as by Louis Dublin & Alfred Lotka in 1930 forms the underpins the work of Forensic Economists. Kiker (1966) acknowledges that while many other researchers are documented in literature as early contributors to the literature on Human Capital Economics (HCE), Adam Smith is regarded by many as the prominent and widely recognised pioneer of Human Capital Economics (HCE) because he ardently suggested in several ways that human beings are an investment which generates a return.

It can be deduced as the literature is summarised that the focus of their works in their era centred around the estimation of the value of HC as an investment in a business enterprise or firm. There is no indication in the available works to insinuate that attention was paid to the effects of HC on public enterprises such as municipalities. Also, worth noting was that, the construct of 'Managerial Capital' had not yet been developed maybe because business enterprises at the time were still localised and served more the interests of owners of the firms / enterprises rather than their investors, communities and or countries.

Similarly, Kiker (1966) clubbed together the 1776 works of Adam Smith, the 1821 works of Jean Baptiste Say, the 1909 works of John Stuart Mill, the 1878 works of William Roscher as well as the 1901 works of Henry Sidgwick and referred to it as early contributions to the literature on Human Capital Economics (HCE). It is out of their contributions that Irving Fisher's definition of capital in 1897 saw human beings being included as part of the definition.

2.2.5 Application of human capital theory

HC theory in its application recognises Abramovitz (1956) who emphasized the significance to authenticate from the works (literature) the immaterial capital contributions. In the context of this study, these intangible capital inputs are the elements which make up MC and will be explored further in details to constitute intervening variables in the study. Jacob Mincer (1958) observed from research, contemporary theories and evolution of HC theory as it relates to economic foundation studies that skills and training, which are components of human capital directly affected the spreading of an individual's total earnings from wages.

This observation is corroborated by the findings in the Good Governance Survey Report (2019) on local government sphere wherein training and skills - human capital have proven to affect personal income distribution across different levels of leadership and management of municipalities. Fabricant (1959) is considered to have been responsible for producing interesting volumes of macroeconomic literature which addressed the viability of human capital theory. The works of Fabricant (1959) were amplified by Gary Becker (1960) when he derived a rate of return on the education of college students as well as the methodology to analyse human capital investments in education. Between 1960 and 1990, HC theory evolution and contemporary theories prominently emerged in Human Capital Economics, Management, Competitiveness, and Organisational Performance, however, literature is silent in the period of observation on the expansion of HC theory into Managerial Capital.

Becker & Gerhart (1996) recorded that dedicated literature on MC started to emerge around 1996. In their argument, they point out that while there are several difficulties with proclaiming the connection between human capital, human resources and organisational performance, however, they holistically agree that human capital processes lead to increased performance. Similarly, Becker & Gerhart (1996) observed that higher performing firms or enterprises tend to have additional resources to devote to improved administration of their human capital.

However, Guest (1997) argued that if the connection between human capital and more specifically MC and performance is to be authenticated, it is essential to stipulate the dominant variables between MC and performance which translate to an enterprises' profitability and efficiency. Similarly, in the context of public sector (in particular, municipalities), performance largely refers to SSD. Performance in the context of the local government sphere refers to Sustainable Service Delivery (SSD). In order to determine the relationship between MC and SSD, there are several intervening variable indicators that make up SSD which need to be defined, specified and measured if correlation between MC and SSD was to be established.

2.2.6 Contemporary human capital theories

Building from the 1960's works of Gary Becker, Theodore Schultz (1961) is credited with amplifying methodologies of Becker, Fabricant and Mincer by indicating the relationship between education and human capital formation. Becker & Gerhart (1996) have argued that if human capital formation is the best practise for firms to follow, generally, firms that lack human capital processes would not succeed in their business endeavours. However, they conceded that this assertion may not always be the case.

Rastogi (2000) amplifies the argument above with a claim that knowledge and skills that are enshrined in human and managerial capital have no substitute. According to Rastogi (2000), such knowledge must be pursued and made the focus of the firm or organisation. The organisation should then invest in skills and expertise that are necessary for meeting their regulatory mandate. In the context of the current study the firm or organisation denotes a local municipality in the sample population.

2.2.7 Significance of HC theory

Literature review confirms the significance of HC theory at three levels. Firstly, it is prominence in the 1960's when the academic and experimental fundamentals of the field were proclaimed and acknowledged Secondly, credit to various scholars and economists to address public policy topics of Human Capital Theory (HCT) in the 19th century.

Thirdly, the application of HC theory has evolved and developed into contemporary human capital theories through which the relationship between education and human capital formation as well as production and human capital could be corroborated. From the works of the different contemporary theorists, there has emerged a representation which draws a relationship between performance and human capital.

A production function referred to as Cobb Douglas production function which draws this correlation highlights the inputs to the production process as labour, physical capital, entrepreneurship, innovation amongst other, that yields different outcomes depending on the number of input variables being considered. Literature has demonstrated that when these factors of production are managed, performance as well as efficiency are enhanced.

2.2.8 The features of human capital

The success of municipalities depends on their power of meeting the SSD mandates and municipalities success is largely measured through their ability to provide essential services to their citizens. According to Nerdrum and Erikson (2001) knowledge and skills are the main features of human capital. The value of personnel in an organisation can be observed through the knowledge and skills that they bring to the organisation. Such knowledge and skills have to be somehow managed and applied towards achieving the mandates of the organisation.

Nonaka and Reinmoelle (2000) observed that knowledge and skills management refer to a procedure of having marketable expertise and using such expertise in order to successfully accomplish the goals of the organization. Teece (2000) argued that although there is correlation between economic growth and knowledge/skills in an organization there is need to establish recently how that growth is linked to how knowledge and skills are managed. This argument somehow brings about the construct 'Managerial Capital' into the picture.

Drucker (1993) suggested that knowledge and skills management are important, economic growth pacesetters and that such knowledge and skills management are built upon the knowledge and skills, and that intellectual ability to harness knowledge and skills is crucial for the enhancement of a product. Therefore, extra consideration is required to differentiate, define, and quantify the capabilities of the organization to manage knowledge and skills to ascertain economic viability of the organization. Economic viability in this study is considered to be the ability of municipalities to use human and material resources towards provision of essential services to citizens.

According to Armstrong (2008) management of knowledge and skills in an organization assist the organization to have a favourable benefit, value added and operating all-inclusive quality plans. Armstrong further records that the act of managing knowledge and skills which employees bring along in municipalities can create the predictions at different levels of the municipality, outline the principles, missions and goals, design strategic plans, and implement those plans according to standards.

In this regard, Armstrong (2008) observes that management of knowledge and that in an organization is value added to human capital value added by investing on managerial knowledge and processes in an organization. Investments in knowledge and skills management translates to the performance of the organization. Accordingly, organization performance would refer to municipal performance in the context of this study.

2.2.9 Organisational performance

According to Fleisher (2003) performance of organisations refers to the process of conveying a specific quantifiable or numerical indicator to an action or procedure. Seang (2003:1) concurred with this definition by alluding that performance of an organisation encompasses determination of how effective organisations / individuals have been in realizing the directives of the organisation. This definition for this study which seeks to determine the correlation between MC and SSD. SSD in this case is considered to be the mandates of municipalities in the South African context. While it can be confirmed that Performance is achieved through best use of HC in an organization / enterprise, the study seeks to confirm if better MC predicts SSD, in the context of municipalities.

2.2.10 Human capital and organisational performance

Josan (2013) observed that organizational performance is characterized by competitiveness, innovation and excellence of human capital. In a way Josan observed that a relationship between human capital and organisational performance exist. She also argued that organisational

performance depends on skills and human capital the organisation possess. Bontis and Serenko (2009) asserted that knowledge management represent the utmost significant factor of organizational accomplishment, particularly the allocation of knowledge connected with the ability to manage human capital effectively.

In concurrence with the notion above Josan (2013) observed that efficiency of an organization is categorized by competitiveness, innovation and excellence in managing human capital in an organisation. This argument and the other that have been projected earlier seem to suggest that at the helm of organisational performance is managerial capital. There has been little effort in defining managerial capital and relating managerial capital to the performance of the organisation

2.2.11 The concept of Managerial Capital

According to Bruhn, Karlan, and Schoar (2010) recorded that even though human capital is the second conventionally scrutinized input factor in the production function, standard growth theories have efficiently explored the importance of input factors such as capital and labour in the production function of firms and countries. Bruhn, Karlan, and Schoar (2010) argued that the role of MC for production has also been inquisitively missing and disregarded in the research and debate on growth and development.

Siphoned from discussions done earlier in this Chapter managerial capital (MC) denotes all practices and qualities of the enterprise operator that have a bearing on the effectiveness of a firm. Effectiveness may include recognized accounting, inventory administration, fiscal or tactical forecasting, and pricing strategy as well as inventiveness, or self-assurance. The enterprise operator in the context of municipalities include administrative and political office bearers at all forms and levels of management in local municipalities.

2.2.12 Functions of managerial capital

From the contemporary theories and evolution of human capital, dedicated literature on MC started to emerge around 1996. Becker & Gerhart (1996) and Guest (1997) have argued that there are numerous complications with affirming a connection between human & capital resource, initiatives and organizational effectiveness.

Becker & Gerhart (1996) argued that human capital developments lead to improved performance and that the substitute elucidation alike indicates: that higher performing firms will have supplementary funds to devote in better human capital management. However, according to Guest (1997) if the link between human capital and more specifically MC and performance as pursued in the study is to be confirmed, there is a need to stipulate blatantly the dominant variables between MC and performance. Components of Managerial capital in this case are considered as being input variables while SSD in the case of a municipal environment, is the output variable. The argument in this study is that MC in municipalities is a predictor of SSD.

Becker & Gerhart (1996) also argue that if human capital is the best practice, organisations that lack human capital processes would not be successful in their businesses, but this is not always the case. Becker & Gerhart (1996) also implied that MC is an investment instead of a cost and a key to the accomplishments of organisations (in the case of this study - local municipalities) in achieving their statutory mandates such as delivery of indispensable services to their citizenry. According to Rastogi (2000) knowledge and skills enshrined in human and Managerial Capital has no substitute and that such knowledge must be pursued and made focus of the organization. Local municipalities should then invest in skills and expertise that are necessary for meeting their regulatory mandates.

Dess & Pickens (2000) record that human capital is 'generally understood to consist of the competences of individuals, knowhow, proficiencies and expertise of the company's employees and managers, as they are appropriate to the task at hand, as well as the capacity to add to this reservoir of competencies, knowhow and expertise through individual learning'. From the above definition, the emphasis of human capital is on knowhow and proficiencies that is retained by management and other personnel.

While Becker, Huselid & Ulrich (2001) had argued that Managerial Capital represents enhanced knowhow, proficiencies and viewpoints that are essential to improve the total productivity and effectiveness of the organisation, in this case local municipalities, Swanepoel, Erasmus, Van Wyk & Schenk (2003) have observed that functions of Managerial Capital transform performance, attractiveness and general achievements of an organisation. Harrison (2009) however, further suggested that Managerial Capital represent a distinct form of organisational capital that is essential for the development of organisations and argued that Managerial Capital in an organisation (in this study suggesting municipalities) collectively represents its single biggest capital asset.

Luthans, Luthans and Luthans (2004:45) observed that continued modest advantage for organisations could accumulate from the performance level barriers of an organisation such as “technological authority, patent defence and government protocols. They also argued that modern organisations, require flexible managerial skills that will substitute swiftness-to-development, efficiently increasing and managing employees’ knowhow, expertise and proficiency – jointly characterized as ‘human capital’. It has become a key success reason for sustained organizational performance. MC which is a subset of human capital will also require special skills that will enable development of organisations such as local municipalities in the Republic of South Africa. This view was shared by Hsu, Lin, Lawler & Wu (2007:253) who detected and contended that it is imperative for any organisation to augment performance outcomes through the optimum placement of prevailing managerial skills and that one of the most significant of these resources is human capital in which managerial capital is located.

According to Thornhill, Van Dijk & Ile (2015) MC refers to a method to recruitment which differentiates management as resources whose current value can be quantified in terms of productivity and whose future value could be improved through investment. From this definition above, by inference, MC can be computed by quantifying productivity increase. If it is determined that productivity increases, then it would mean MC would have been established.

This study describes MC as an organisational leadership asset that can be measured through various skills sets or components that enhance the sustainable development of the organization including sustainable service delivery. MC is a major subset of human capital. Van Dijk & Ile (2015)

observed that literature on human capital knowhow can be apportioned among groups and engrained within organisational procedures and routines.

2.2.13 Performance measurement

As identified earlier, overall performance of municipalities is measured in terms of SSD outcomes. In this case SSD represents the output variable while MC through its applicable attributes to local municipalities represents the input variable. Various models of performance measurement of organisations have been proposed and used. One of the Common Models of Firm Performance Measurement according to Neely, Adams and Crowe (2001) is the Balanced Scorecard. Neely, Adams & Crowe, (2001). recorded that the Balanced Scorecard (BSC) model was developed in the early 1990's by Robert Kaplan and David Norton and was referred to as a tool used for relating, expounding, and executing a vision and the strategy of a firm into fixed targets and clear set of financial and nonfinancial performance indicators

According to Neely, Adams & Crowe (2001) the BSC model of performance measurement is based on analysis of six (6) key business perceptions, which are (1) financial perspective (how do we look at shareholders?); (2) customer perspective (how do customers see us?); (3) Knowing what customers want in terms of quality, costs and distribution, and the most important thing, (4) Future Perspective (what they want in the future from the organization); and (5) Internal Processes Perspective (what must we excel at?). Neely, Adams & Crowe (2001) argued that discernment of how internal organisational processes work is very vital if the organization was to achieve its goals and to knowhow to add the expected value to the products or services that the customers purchase. (6) Invention and Learning Perspective (can we continue to improve and create value?)

The BSC depends on scores that are assigned by a body of individuals who are specialised in related fields. As a result, naivety is reduced and hence the scores are anticipated as being consistent (Neely, Adams & Crowe, 2001). BSC model is a generally used tool in reporting of municipalities' performance in South Africa. However, in reporting of the scores there has been no effort of relating those scores to managerial capital. This study has been able to establish through literature review

that MC can be measured using the Cobbs-Douglas production function as it has been used to determine productivity and efficiency of a firm / enterprise.

2.2.14 Factors of production, a concept of macroeconomics

Literature review according to C. Cobb and P. Douglas (1928), identified macroeconomics factors of production to include physical capital (K), land (P), labour (L) and entrepreneurship (H). It also confirms that one cannot make something from nothing. In order to produce or make a product, one need input supplies such as equipment, resources, and some know-how, too. How much one has of these input supplies can affect their production.

According to economics literature, a production function refers to a mathematical representation of calculating the output of a production process in relation to its input. The formula attempts to estimate the maximum output one can get from a certain number of input units. It is acknowledged that inputs are always in limited supply therefore an optimum combination of labour and capital generally determines maximum production capacity a firm or enterprise can derive using a production function.

Therefore, the macroeconomics factors of production are identified from literature review as physical capital (K), also referred to the tangible assets that are created for use in the production process. Physical capital encompasses things such as buildings, machines, computers, and other related equipment. Labour (L), which represent input of skilled and unskilled activities of human workers. Land (P), which includes natural resources, raw materials, and energy sources, such as oil, gas, and coal; and entrepreneurship (H), which is the quality of the business intelligence that is applied to the production function.

From the macroeconomic factors outlined, the production function is articulated in the formula: $Q = f(K, L, P, H)$, where the quantity of product output is a function of the combined input amounts of each factor. Obviously, not all businesses require the same factors of production or number of inputs. Similarly, municipalities also do not require the same factors of production or the same number of inputs. This is because they differ in categorization, size, geographical location, population being serviced, exposure to inherent risk, technological advancement, scope of services being discharged,

amongst other considerations. Hence, an optimum combination of these input factors of production and their management thereof, should translate to improved service delivery (SALGA,2018).

Another form of the abridged production function is the one where the inputs are just labour (L) and physical capital (K). The formula for this abridged form is articulated by: $Q = f(L, K)$, in which labour and capital are the two factors of production with the greatest impact on the quantity of output.

The Cobb-Douglas production function

According to Cobb and Douglas in Banker and Natarajan (2008) and Sircar and Choi (2009) Cobb-Douglas production function has been widely used in studies whose endeavours relate to the determination of the relationship between input and output of an economically operated firm. The basic form of the Cobb-Douglas production function is represented as follows:

$$Q = A \cdot L^\alpha \cdot K^\beta$$

Where:

Q = production rate (SSD);

L = labour input;

K = MC input variables (Integrated Risk Management; Planning and human capital development; Knowledge Management; Corporate Governance, Municipality Finance) input;

A = A is a positive constant (Called Total Factor Productivity),

- In the case all the six (6) municipalities, production factors such as capital, land, labour and entrepreneurship alone do not contribute to enhanced performance of a municipality. Performance of a municipality as outlined before differs from performance of a firm or company or organisation. For a municipality, performance represents the collective ability of the municipality to deliver mandatory services to its citizenry, efficiently and cost effectively. This ability is referred to as Sustainable Service Delivery (SSD).

- The AGSA Annual Report 2017 emphasises that the performance of municipalities is a key indicator of local governance which ensures answerability, compliance and appropriate financial management. These intervening variables allow for municipal answerability in the quest to establish the correlation between audit performance and sustainable service delivery. The AGSA Annual Report 2017 of municipal audit performance is the work that is authenticated by SGSA on municipalities comparing plans in the IDP's, budgets allocated for these plans and programmes and comparing with what has been delivered on the ground in communities. Audit Performance therefore translates into performance outcomes which indicate the level of sustainable service delivery achieved and afterwards sustainable service delivery indicates the measure of good governance at local municipality level.
- There exist macroeconomic factors of production for a municipal environment, these factors may require to be aligned or even adapted to applicable conditions of a municipal environment in order to measure sustainable service delivery performance, as alluded to above. By so doing, determination of sustainable service delivery will provide a measure for managerial capital in the main.
- The production function referred to above, is further adjusted according to the works of Cobb & Douglas (1928) who articulated a view that production output (Q) is the result of the amount of labour (L) and physical capital (K) invested. The perspective is further applied to the municipal / local government environment to consider the influence of related variables to production output, which in this case, refers to Sustainable Service Delivery (SSD) variables. It is in this context that the significance of HC theory is being considered, examined, evaluated and summarised. The following conclusions can be drawn from the selected literature review analysis conducted:
- According to Woodhall (1997), Human Capital theory rests on the assumption of human capital theorists who argued that formal education is very instrumental and vital to advance the productive competence of a population;
 - (i) that an educated population is a productive population;
 - (ii) that education increases the productivity and efficiency of workers;

- (iii) that by increasing the level of intellectual stock of economically productive human competence, the level of productive competence of a population improves;
- (iv) that the delivery of formal education is considered an investment in human capital, which supporters of the theory have considered as correspondingly or even more valuable than that of physical capital (K).
- On the other hand, Becker (1993) pointed out that:
 - (i) human capital theory has resolved that investment in human capital leads to superior economic outputs although the rationality of the theory is sometimes hard to prove and inconsistent. This is because, in the past, economic strength was mainly reliant on on tangible physical assets such as land, factories and equipment; labour was a necessary component which escalated in value as the business improved investment in capital equipment;
 - (ii) modern economists agree that education and healthcare are the keys to refining human capital and eventually increasing the economic outputs of nations.
- According to Friedman (2017), he amplified the importance of education in the new global knowledge economy by recording that:
 - (i) hard tangible assets may not be as important as investing in human capital thus exposing millions of people to HC theory;
 - (ii) that there is a shared recurrent theme in his book that people and education (human capital) are vital to a nation's economic accomplishments.
 - (iii) that throughout western countries, education has recently been re-imagined under human capital theory as principally an economic expedient;
 - (iv) that HC theory has become the most influential economic theory of western education that is applied to set the framework of government policies since the early 1960s;
 - (v) that HC theory is increasingly seen as a key contributor of economic performance. Friedman (2007) suggested that a key strategy in influencing economic performance has been to engage a conception of individuals as human capital and various economic descriptions such as high-tech variation, investigations, inventions, productivity, education and competitiveness.

- (vi) HC theory highlights the significance of education and training as the keys to participation in the new global economy. The success of any nation in terms of human development is largely dependent upon the physical and human capital stock.
- (vii) as a result, recent social research has largely focused on the behavioural sciences of humanity in relation to economic productivity. Generally, human capital represents the assets each individual develops to enhance economic productivity. Further, human capital is concerned with the wholesome adoption of the policies of education and development.
- (viii) the human capital theorists argue that an educated population is a productive population. They emphasize how education increases the efficiency and effectiveness of workers by increasing the level of intellectual stock of economically productive human competence, which is a product of distinctive capabilities and investment in human beings.
- (ix) that formal education is considered a productive investment in human capital as opposed to physical capital which the advocates of the theory have pointed out;
- Babalola (2003) records that the wisdom behind investment in human capital is based on three opinions, namely:
 - (i) that the new generation must be empowered with appropriate parts of the knowhow which has already been amassed by previous generations;
 - (ii) that the new generation should be taught how existing knowhow should be applied to produce new products, to introduce new processes, production methods and social services and;
 - (iii) that people must be stimulated to develop completely new ideas, products, processes, and methods through creative approaches.
- Fagerlind and Saha (1997) submit that:
 - (i) HC theory affords a basic justification for large public expenditure on education both in developing and developed nations. They further argue that HC theory is consistent with the ideologies of democracy and liberal progression found in most western societies;
 - (ii) efforts to promote investment in human capital were seen to result in rapid economic growth for society. For an example, in the case of individuals, investment in human

capital was seen to provide returns in the form of individual economic success and achievement.

- Fagerlind and Saha (2007) concur that:
 - (i) most economists agree that it is human resources of a nation, not its capital nor its material resources, which ultimately determine the character and pace of its economic and social development.
 - (ii) human resources therefore constitute distinguishing factor that makes up the ultimate basis of the wealth of nations.
 - (iii) Capital and natural resources are passive factors of production, human beings are the active agencies who accumulate capital, exploit natural resources, build social, economic, and political organizations, and carry forward national development.
- Different scholarly reviews through independent research, such as those conducted by Blaug (1976) and Scot R Wetland (1996) have not only provided a general reference to HC theory, its former development, and its prominent methodological approaches but they have independently shown and acknowledged that education is relevant for the economic welfare of a people. They have argued that:
 - (i) no matter how you look at human capital formation, you will find that people no matter how rich or poor, they are rational in their decision making because they make current investment decisions in order to increase their expected future returns. Therefore, like all other decisions' individuals consider their expected costs and benefits when they are faced with making decisions of how much they need to invest in their human capital;
 - (ii) review of the foundation studies supports the position that educators should draw their own informed conclusions and define the scope of future human capital research;
 - (iii) while it has been recognized that the past century witnessed investment in human capital as the single utmost vital source of growth in modern economics, it is also documented that the process of investing in human capital takes much longer as compared to investment in physical capital. A typical example being a minimum of 18years investment in an individual's formal education plus a further lifetime of short-

term human capital investments in on-job training, learning by doing, life experiences and informal education amongst others.

- Langelett (2002) further makes a point that:
 - (i) human capital formation is both a macroeconomic and microeconomic issue. At a macro level, human capital formation assumes that genetic endowments such as intelligence are distributed in large samples from one country to another while at the micro level, decisions of investments in human capital are made by everyone in society;
 - (ii) individuals increase their human capital from time to time through various training and educational experiences primarily for the sake of future monetary benefits or non-monetary returns. In other instances, people migrate, quit their current jobs for higher paying jobs or quit high paying jobs and take up low paying jobs with higher learning potentials.
- Mahroum (2007) suggested that:
 - (i) at a macro-level, human capital management is about the capacity to develop talent, capacity to deploy talent, and capacity to draw talent from somewhere else. Collectively, these three capacities form the backbone of any country's human capital competitiveness.
- In the final analysis, HC theory can be considered a backbone of human and economic development as it advocates that individuals and society derive economic gains from investments in its people.

2.2.15 Influence of managerial capital components

According to Kanyane (2011) the Auditor-General (AG) gave only seven (7) out of two hundred and thirty-seven (237) municipalities, which represent about 2,95% of the total municipalities' clean audits for the 2010 - 2011 Financial Year (FY). Again, seven years (7) later the AG gave only eight (8) out of two hundred and fifty-seven (257) municipalities, which represent about 3,11% of total municipalities clean audits during 2017 - 2018 FY.

According to the AGSA (2020), the audit outcomes for local government for the period 2018-19 indicates that of the 229 municipalities audited, only 2% of these municipalities were fully complying with the audit

He further argues that while public finance management may be the dominant variable / indicator in shaping the feasibility of local government, it is necessary but not sufficient for success. However, Managerial Capital (MC) is expected of municipal stakeholders such as municipal officials, mayors, ward councillors, traditional leaders and interest groups, to administer municipal finances appropriately.

In his conclusion, he concedes that although the Municipal Finance Management Act was promulgated to secure comprehensive and feasible management of the financial affairs of municipalities in the local sphere of government, studies in Public Administration confirm that most rural municipalities in South Africa are not self- sustainable. As a result, there are several observation variables that include corporate governance, talent management, municipal finance, project management, integrated risk management, public participation, knowledge management, municipal planning and human capital development (Managerial Capital) still engulfing rural municipalities.

Again, Schoeman (2011), in his empirical analysis study of Fiscal Performance and Sustainability of Local Government in South Africa argues and demonstrates that many municipalities do not comply with the requirement that a portion of current expenditures be financed by means of municipalities' own resources. Furthermore, local government finances are highlighted by substantial variance as far as collection of own income is concerned. While close to half of them finance more than 50 percent of their current expenditures from own resources, about one third (33%) are largely dependent on grants from upper spheres of government and generate less than 20 percent of current expenditures from their own resources.

He concludes that the financial and human capital sustainability of the local government sector, given the present scenario of financial movements, is a motive for worry. Schoeman (2011) argues that in order for municipalities to comply with international criteria for solid financial performance, several municipalities will have to improve their productivity (sustainable service delivery) in relation to their answerability (to their immediate communities, provincial sphere and national sphere),

corporate governance, compliance, integrated risk management, financial management, municipal resource planning, own-revenue collection, and human capital development amongst others.

2.2.16 Overview of the state of public service delivery

The first round of IDP's in 1996 were arranged largely by municipal advisors as the resource planning capacity of the new local authorities was inadequate. Subsequent AGSA reports on local government have revealed that many municipal advisors that were used to assist municipalities flopped to yield the paradigm shift envisaged for the post-apartheid municipal planning requirements. While the first round of IDP's cited the need for human and managerial capital, there were no indicative strategies and fixed timelines to guide the investment processes into these sectors.

2.2.16 (a) Service delivery

Service delivery is regarded as a combined, concentrated, unchanging and impartial process to provide for goods and services. It should meet community expectations through the provision of goods and services (Du Toit, Van der Walt, Van Niekerk, Doyle and Knipe; 2002:128).

In the framework of this study, service delivery refers to the provision of municipal mandatory services such as waster electricity, sanitation refuse removal and health care to communities by municipalities. This is the core developmental objective and the business of local government in the country to restore dignity of the majority in post-apartheid South Africa (SA Constitution, 1996). Failure to deliver these services efficiently would signal the ineffectiveness of the municipality to discharge its mandatory duties satisfactorily and precisely.

2.2.16 (b) Local government sphere

Cameron and Stone (1995:33), record that local government has the necessary authority and functions to provide services that maintain and promote the well-being of all people within their area and should deliver access to basic services such as water, electricity, sanitation, refuse removal and health care. For the purposes of this study, local government is referred to as the third government sphere, of municipalities that is closest to the people and situated within the communities.

2.2.16 (c) Municipal integrated development planning (IDP)

Transformation of local government, from regulatory to developmental local government, is represented by the process of Integrated Development Planning (IDP). The Constitution of the Republic of South Africa (1996) through Section 35 (1) of the Municipal Systems Act of 2000, refers to IDP as the “principal strategic planning instrument, which guides and informs all municipal planning and development, and all decisions with respect to planning, management and development in the municipality”. Therefore, anything and everything a municipality does will have to conform with the procedures drawn in the IDP.

Harrison (2008) also observed that Integrated Development Planning (IDP) authorizes municipalities to develop strategic planning priorities on a 5-year cycle basis which in the framework of this study, refers to setting up of a feasible human and Managerial Capital (MC). The IDP is a planning instrument that was announced in 1996 in an amendment to the Local Transition Act, 209 of 1993 from which all local municipalities were obliged to articulate IDP’s.

The necessary tool for achieving objectives is investment in Managerial Capital (MC). It is fundamental for every municipality to plan for this investment. As observed by Harrison in van Donk, Swilling, Pieterse & Parnell (2008) the IDP is the leading instrument of local government planning in South African municipalities. IDP affords municipalities with a tool for financial budgeting, financial management, integrated risk management, accountability, stakeholders’ engagement, municipal resource planning, corporate governance and project implementation on a 5-year cycle basis.

2.2.16 (d) Support structures for municipalities

At the beginning of 1998, national government established support structures for municipal finance, municipal resource planning, corporate governance and knowledge management in collaboration with agencies such as German’s GTZ and the South Africa’s Council for Scientific and Industrial Research (CSIR). The support was in the form of guide packs, training program for officials and councillors, and management support systems resourced by the national government.

According to Van Donk et al (2008) this was the initiation of investments in human and Managerial Capital (MC). The initiative was part of transformation to ensure that management and council employees meet their responsibilities.

The main objective of local government transformation was to safeguard that public services are delivered in a way that is sustainable, equitable, timeous, efficient, effective and affordable, and consistent with the Batho Pele Vision, which espouses a better life for all South Africans by putting people first. The Batho Pele Vision promotes principles of consultation, quality service standards, access, courtesy, information, redress, openness, transparency and value for money.

Municipal services refer to services such as access to affordable infrastructure that the local government sphere is accountable to discharge to all people living in the municipal area.

Goldman and Raynolds in van Donk et al (2008) argue that public service delivery has improved significantly in many urban and former townships than in rural municipalities like the ones that anchor this study, however Goldman and Reynold in van Donk et al (2008) distinguish that the intensities and limitations of rural local government at local and district levels dangle on the managerial and employees' acceptable utilisation of resources at their disposal.

They argued that the strengths of local municipalities lie in their ability to account (to their immediate communities, provincial sphere and national sphere), build a resilient corporate governance system, strict compliance to MFMA and related municipal legislations, control their integrated risk management profile, implement strict financial management controls, strategic placement of municipal resources planning as a tool to assist municipalities to generate and collect own-revenue, and to invest in human capital development.

According to Goldman and Reynolds (2008), local government sphere, particularly municipalities generally employ residents from within the municipal area and this advantage places municipalities in a stronger position to comprehend community needs through their knowledge of issues at community level. Goldman and Reynolds (2008) asserted that the weaknesses of local rural municipalities are often not financial in nature but rather poor or inadequate human and Managerial Capital (MC). They argue that there seems to be limited investment in Managerial Capital (MC) development which translate to poor municipal performance in the areas of financial management

and corporate governance in the main. The consequences thereof lead to inadequate internal controls of financial resources, which are a support competency provided by the district, to local rural municipalities.

A review of the six (6) local municipalities' IDP (2013 to 2018) indicate that, the adoption of the first five-year plan (IDP) in 2000, has seen more citizens see considerable access to municipal services such as water, electricity, refuse removal, good roads and housing. However, the AGSA Annual Report (2016/2017) have revealed that there are indications that municipalities of Mpumalanga, North West and Limpopo provinces in the main, still have difficulties which range from of access to sanitation, revenue collection, low public participation, poor governance systems, lack of capacity to building institutional and administration capability.

On the other hand, more specifically, municipalities of Eastern Cape to a larger extent as well as Limpopo Province have challenges of poor implementation of projects, poor state of urban and rural roads, poor condition of the existing road maintenance fleet, revenue collection, civil obedience, financial mismanagement, weak administration capability, political instability and lack of sanitation. Similarly, Madibeng Local Municipality in North West Province, struggle with provision of poor-quality drinking water, refuse removal, sanitation, revenue collection, financial mismanagement, poor governance and weak administration capability while Emfuleni Local Municipality in Gauteng Province continue to experience challenges of water loss, water shortages, old malfunctioning infrastructure, lack of skilled resources, revenue collection, sewage spillages into the Vaal River System and lack of treatment capacity.

2.2.17 Conceptual and methodological framework

Over and above academic considerations of the study, some of the general assumptions the study is making is the believe that everyone understand what local government is, and that, the state of local government (or municipalities) corporate governance, knowledge management, municipal resources planning and municipal finances is of prominence, given that this is the tier of government accountable for sustainable service delivery (supply of electricity, water, sanitation, removal of waste and firefighting, etc) on the ground.

The purpose of Statistics South Africa has always been to provide information to policymakers, economists and other stakeholders for further analysis and financial assessment of the state of local government. The two main sources of municipal data to be considered in the study are internally generated reports from respective municipalities as well as information sanctioned by national treasury and related government agencies in the form of publications. Internally generated reports would be comprised of: Service Delivery Business Implementation Plans (SDBIPs), Integrated Development Plans (IDP's), Strategy Documents, Statements of Financial Performances and Annual Performance Plans (APP's) amongst others.

2.2.18 Measures of municipal capital

Delaney & Huselid (1996) observed that there is strong linkage between Managerial Capital and Performance. According to Patterson et al. (1997) measurement of human capital and or managerial capital is essential to gauge the impact of Managerial Capital (MC) interventions and address areas for improvement. The model of measuring human capital which is adapted for this study was proposed by Guest *et al.* (2000) with the aim of specifying key human capital (Managerial Capital for this study) practices and assess their characteristics.

The practices are then measured. In this study key practices identified for measuring Managerial Capital in local municipalities are financial measures; measures of output services, number of residents served; number of errors; residents' satisfaction and measures of time - lateness, absence etc. (Guest et al.,2000). According to Guest et al. (2000) these outcomes should reflect employee attitudes and behaviour, internal performance, such as productivity and quality of service delivery.

Performance by Managerial Capital (MC) are easily measured by public opinions response to service delivery issues and mostly these opinions are expressed as violent service delivery demonstrations in less performing municipalities and none existence of violent service delivery protests in well performing municipalities. Violent public demonstration are however not empirical instruments for measures of Managerial Capital (MC) competencies as motives for such demonstrations vary from genuine municipal services concerns or grievances to allegations of corruption against elected public representatives, to factional politics, nepotism, etc. According to human capital (2007) for stakeholders such as investors asserts that the measures of efficiency of

Managerial Capital (MC) include: the percent of employees trained, revenue per employee, training expenditure and compensation amongst others.

The five (5) measures listed above seem not to apply exactly to public serving enterprises such as the likes of municipalities. The measurement of Managerial Capital (MC) in local municipalities remains an area where little commonality can be found. As observed by Ulrich (1998) there is agreement, however, that just relying on financial measures of performance is likely to result in a highly partial evaluation. Guest *et al.* (2000) model of performance measurement for Managerial Capital is adapted for this study in relation to the local municipality environment.

According to Guest *et al.* (2000) the model' perspective considers accountability to communities and stakeholder opinion (public opinion as adapted to this study) which provides some emphasis to performance outcomes of concern to the range of municipal stakeholders (communities, district, province and national government). According to Guest *et al.* (2000) these outcomes need to reflect employee attitudes and behaviour, internal performance, such as productivity and quality of goods and services; and external indicators, such as sales and financial performance.

For the purposes of this study if the research is to guide policy and practice, there is need to collect several potentially related outcomes that extend beyond a narrow definition of municipalities' performance based on just public service delivery. The model adopts a public view or balanced scorecard approach to capture the complexity of Managerial Capital (MC) measurement parameters and activities. The public view approach identifies what are regarded as fixed variables in municipalities' Managerial Capital (MC) performance measurement. Annual budgetary allocations and transfers to local municipalities conducted by the national treasury are regarded as fixed variables.

The public opinion view adopted in this study considered such independent variables as availability of natural resources as alternative revenue sources, managerial skills and knowledge (financial and technical management), and availability of skilled labour are independent variables. Outcomes such as provision of water and sanitation, electricity, roads, management of infrastructure are considered as measures of the performance outcomes of dependent variables.

2.2.19 Gap in the literature

The insufficiency of an efficient structural configuration required in municipalities advances worries over the mutual benefits of municipal strategy in as far as municipalities capital and municipal Managerial Capital (MC). This is vital in the delivery of critical service to the citizens in the municipal jurisdiction.

From the literature reviewed it is evident that organisational strategies are unlikely to be accomplished or achieved without aligning them with Managerial Capital available or without taking investment decisions on Managerial Capital (MC) within an organisation. There seems to be limited empirical studies which have investigated the precise extent to which municipalities' Managerial Capital (MC) is linked to Sustainable Service Delivery (SSD).

2.3 Section B: Overview of municipalities in the study population

2.3.1 Introduction

Chapter 1 briefly described the population of the study as being six (6) municipalities of the Republic of South Africa. Section B is intended to provide detailed synopsis of the municipalities that are part of the study population. Also provided in section B is the Auditor General's Reports that pertain to Municipal Financial Performance and the state of service delivery across the study population. This section of the literature review lays a foundation for data collection through document analysis.

2.3.2 Overview of Madibeng Local Municipality

The 2018 Madibeng Integrated Development Plan records that Madibeng Local Municipality (MLM) is classified as a Category B municipality, situated in the Bojanala Platinum District of the North West Province. It is one of the five (5) municipalities that make up the Bojanala Platinum District and is

located between Magaliesberg and Witwatersrand, 60km away from Rustenburg and 50km north of Pretoria. MLM occupies a land area of 3 720km².

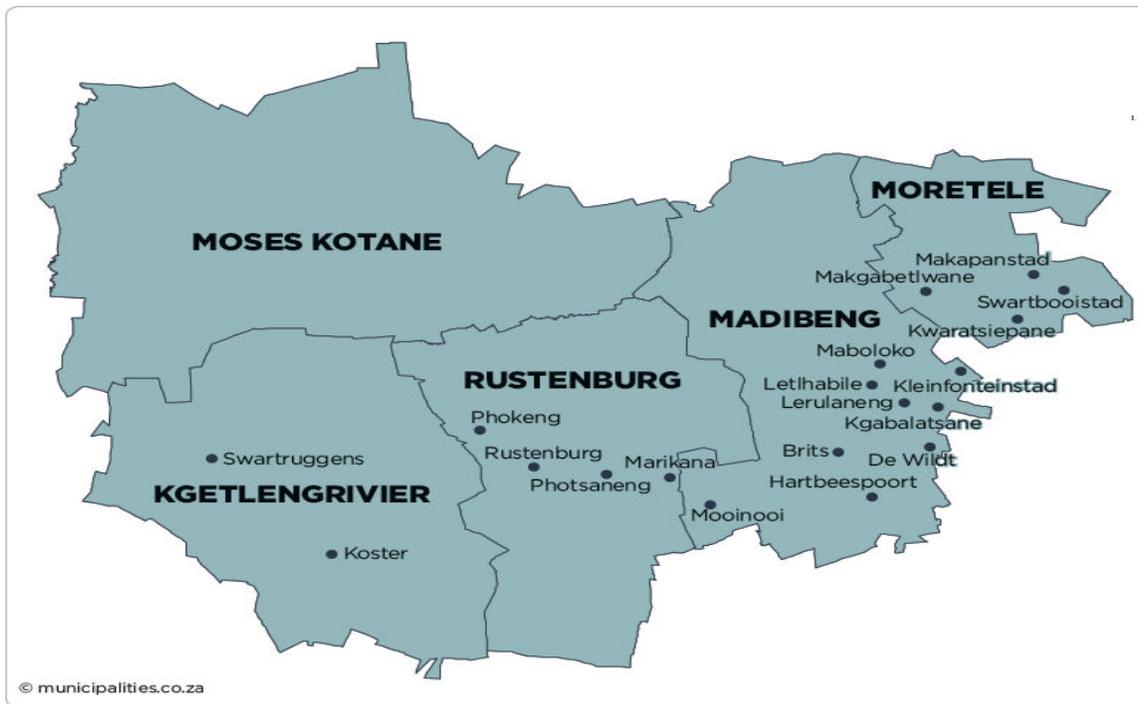


Figure 2.1: Map of Madibeng Local Municipality (adopted from Madibeng Local Municipality Integrated Development Plan (2017/18))

According to Madibeng Local Municipality Medium Term Revenue and Expenditure Framework (2017/18), Madibeng Local Municipality is purposefully located in relation to Johannesburg (Gauteng Province), Polokwane (Limpopo Province), Harare (Zimbabwe) and the Maputo Harbour (Mozambique). It is located alongside the Heritage Route that joins the World Heritage Site, the Pilanesberg and Madikwe Game Reserves. Madibeng Local Municipality has a diversified economy nonetheless mining, agriculture, and manufacturing are the predominant economic activities. Tourism activities are also common in this municipality and are mainly around the Hartbeespoort Dam and the Cable Way which represent the second most visited places in South Africa after the Waterfront & Table Mountain in Cape Town, Western Cape Province.

2.3.2 (a) MLM financial performance results

Madibeng Local Municipality has for the six years achieved same results from the Auditor General's annual reports (Auditor General Report (2018/19)). The Auditor Generals summary of reports are captures in Table 2.1

Table 2. 1: Auditor General's Reports 2018/19

All values: R'000	2019/20	2018/19	2017/18	2016/17	2015/16
AUDIT OUTCOME	Audit results not available	Disclaimer of audit	Disclaimer of audit	Disclaimer of audit	Disclaimer of audit

Source: Annual Performance Report (2018/19)

2.3.2 (b) MLM service delivery performance outcomes

Madibeng Local Municipality's service delivery performance outcomes described by the Annual Performance Report (2018/19) indicates that the municipality has been able to achieve its service delivery mandates. Table 4.2 below summarises service delivery performance for the years 2013 to 2020).

Table 2. 2: MLM Service Delivery Performance Outcomes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Water provision is a responsibility of the municipality?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide water?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality in fact provide water?	Yes	Yes	Yes	Yes	Yes
❖ Is water provision outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	159 922	152 546	161 655	129 512	129 512
❖ What is the number of domestic household delivery points?	159 922	152 546	161 655	129 512	129 512
❖ Inside the yard	119 834	112 458	112 458	112 458	112 458
❖ Less than 200m from yard	9 921	9 921	27 217	17 054	17 054
❖ More than 200m from yard	30 167	30 167	21 980	0	0
❖ What is the number of domestic households with access to free water?	4 194	6 377	39 560	3 752	3 627
2. Electricity					
❖ Electricity provision is a responsibility of the municipality?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide electricity?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality in fact provide electricity?	Yes	Yes	Yes	Yes	Yes
❖ Is electricity outsourced/commercialised?	Yes	Yes	Yes	Yes	Yes
❖ What is the number of households and non-domestic customers with electricity?	140 834	140 111	138 197	136 488	130 164
❖ What is domestic households with access to free electricity?	33 121	31 744	30 041	22 165	21 882
3. Sewerage and Sanitation					
❖ Sewerage provision is a responsibility of the municipality?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide sewerage?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide sewerage service?	Yes	Yes	Yes	Yes	Yes
❖ Is sewerage outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which sewerage service provided	72 974	72 974	72 974	69 378	66 976

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
Number of households using:					
❖ Flush toilet - public sewerage	46 005	46 005	46 005	44 405	43 663
❖ Flush toilet - septic tank	0	0	0	8 048	8 048
❖ Ventilated pit latrine	25 309	25 309	25 309	13 671	13 671
❖ Bucket system	0	0	0	0	0
❖ Other	0	0	0	1 594	1 594
❖ Domestic households with access to free sewerage service	4 194	6 377	6 263	3 752	3 627
4. Solid Waste Services					
❖ Do you think the municipality is responsible for solid waste?	Yes	Yes	Yes	Yes	Yes
❖ Do you think municipality has infrastructure for solid waste management?	Yes	Yes	Yes	Yes	Yes
❖ Do you think municipality actually provide solid waste service?	Yes	Yes	Yes	Yes	Yes
❖ Is solid waste service outsourced/commercialised?	No	No	No	No	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Number of households and non-domestic customers to which provided	75 021	74 869	36 585	36 585	36 585
❖ Domestic households with access to free solid waste service	4 194	6 377	6 263	3 752	3 627

Source: Annual Performance Report (2018/19)

2.3.3 Overview of Ephraim Mogale Local Municipality

Ephraim Mogale Local Municipality Integrated Development Plan (2016/17)) categorizes EMLM as a Category B municipality, situated in Sekhukhune District of Limpopo Province. It is one of the smallest municipalities in the district with a land area of 2 011km² established after the local elections in the year 2000. EMLM is birthed out of the amalgamation of 8 former Transitional Local Councils (TLC's) and comprise of 16 wards, one town and 75 villages. This municipality was in-between the provinces of Limpopo and Mpumalanga.

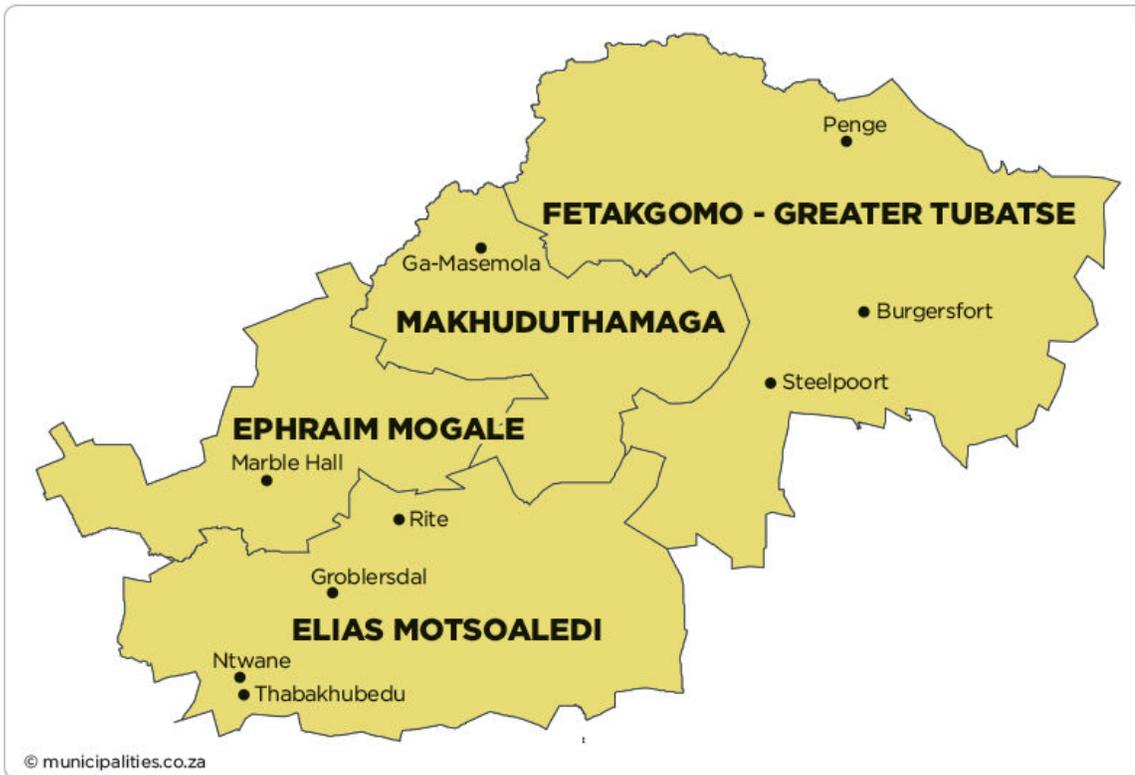


Figure 2. 1: Ephraim Mogale Local Municipality (adopted from Ephraim Mogale Local Municipality Integrated Development Plan, 2016/17)

Ephraim Mogale Local Municipality (adopted from Ephraim Mogale Local Municipality Integrated Development Plan, 2015) was incorporated into the Limpopo Province after the 2006 municipal elections. The municipality is about 160km from Pretoria and about 190km from Polokwane.

The municipality used to provide water to Marble Hall, Leeuwfontein and Zamenkomst. EMLM is licensed to provide electricity to Marble Hall town as well as provide solid waste removal services to Marble Hall, Leeuwfontein and Elandskraal. On the other hand, Sekhukhune District Municipality (SDM) provides water and sanitation to all other areas within the district. The municipality is battling with a huge backlog in terms of water provision, sanitation and road infrastructure (Ephraim Mogale Local Municipality Integrated Development Plan, 2015).

2.3.3 (a) EpMLM financial performance results

For a consecutive six years as indicated in Table 2.3 below Ephraim Mogale Local Municipality achieved Unqualified Audit results (Auditor General Report 2018/19).

Table 2. 3: Summary of Auditor General Reports (2018/19)

All values: R'000	<u>2019/20</u>	<u>2018/19</u>	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>
AGSA AUDIT OUTCOME(S)	Audit results not available	Qualified audit	Financially unqualified	Qualified audit	Qualified audit

Source: Auditor General Report (2018/19)

2.3.3 (b) EpMLM service delivery performance outcomes

EMLM as reported in Ephraim Mogale Local Municipality Integrated Development Plan (2016/17) has been struggling to meet all the mandates of service delivery. Table 2.4 below summarises the performance of the municipality in the past six years. Contents of table 4.4 are obtained from Performance Management Review Framework (2016/17)

Table 2. 4: Ephraim Mogale Service Delivery Performance Outcomes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Does the municipality have responsibility to provide waters service?	No	No	Yes	Yes	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Does the municipality have the responsibility to provide water service?	No	No	No	No	Yes
❖ Do you think the municipality have infrastructure for water service?	No	No	No	No	No
❖ Do you think the municipality actually provide water service?	No	No	No	No	No
❖ Is water service outsourced/commercialised?	0	0	0	0	0
❖ What is the number of households and non-domestic customers who are supplied with water?	0	0	0	0	0
❖ What is the number of domestic households/delivery points/	0	0	0	0	0
❖ Less than 200m from yard	0	0	0	0	0
❖ More than 200m from yard	0	0	0	0	0
❖ Domestic households with access to free water service	0	0	0	0	0
2. Electricity					

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is the municipality responsible to provide?	Yes	Yes	Yes	Yes	Yes
❖ Does the municipality have infrastructure to provide?	Yes	Yes	Yes	Yes	Yes
❖ Does the municipality actually provide?	Yes	Yes	Yes	Yes	Yes
❖ Is the electricity service outsourced/commercialised?	Yes	Yes	Yes	Yes	Yes
❖ Number of households and non-domestic customers to which provided	34 411	34 255	35 652	35 652	34 591
❖ Domestic households with access to free basic service	1 950	1 950	1 950	1 450	1 897
3. Sewerage and Sanitation					
❖ Do you think the municipality is responsible to provide sewerage?	No	No	Yes	Yes	No
❖ Do you think municipality have infrastructure for sewerage?	No	No	No	No	Yes
❖ Do you think the municipality can actually provide sewerage service?	No	No	No	No	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is the sewerage service outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers	0	0	0	0	0
Number of households using:					
❖ Flush toilet - public sewerage	0	0	0	0	0
❖ Flush toilet - septic tank	0	0	0	0	0
❖ Ventilated pit latrine	0	0	0	0	0
❖ Bucket system	0	0	0	0	0
❖ Other	0	0	0	0	0
❖ Domestic households with access to free basic service	0	0	0	0	0
4. Solid Waste Services					
❖ Do you think the municipality is responsible to provide solid waste?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide solid waste?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality actually provide solid waste service?	Yes	Yes	Yes	Yes	Yes
❖ Is the service outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers	6 369	6 369	5 619	5 619	5 619
❖ Domestic households with access to free basic service	0	0	0	0	3 562

Source: Performance Management Review Framework (2016/17)

2.3.4 Overview of Dr. JS Moroka Local Municipality

Dr JS Moroka Local Municipality Integrated Development Plan (2016/17) classifies Dr JS Moroka Local Municipality as a Category B municipality, located in Nkangala District of Mpumalanga Province. DrJSMLM is one of the smallest of municipalities in the district, with Siyabuswa as the capital town of the municipality, which forms part of the larger economic regions of the City of Tshwane, City of Johannesburg, Emalahleni and Steve Tshwete Municipalities, due to the fact that these areas provide employment opportunities to a sizable number of the municipality's population.

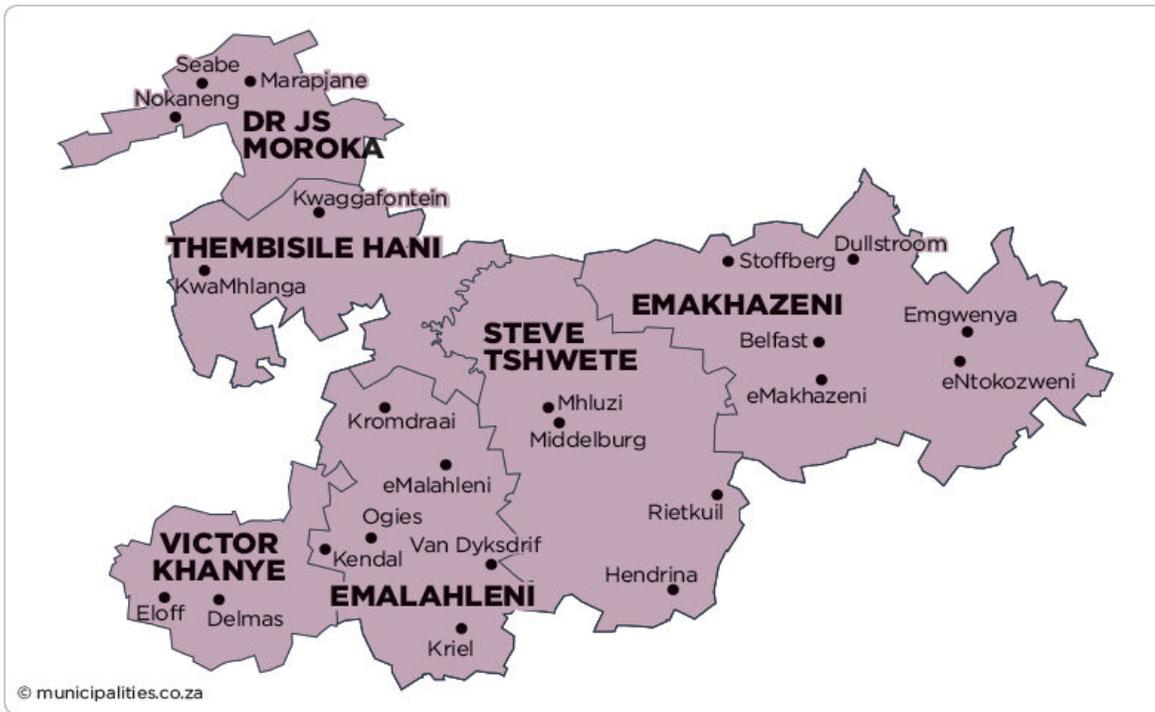


Figure 2. 2: Dr. S Moroka Local Municipality (Source: Dr JS Moroka Local Municipality Integrated Plan, 2016/17)

The geographical area includes 55 villages. This municipality has both peri-urban and rural characteristics. Most of the land is used for residential purposes though some pieces of land are under the control of traditional leadership. The area has a huge potential for tourism industry.

2.3.4 (a) DrJSMLM financial performance results

According to The Auditor General Report (2018/19), Dr JSMLM had three Qualified Audits while one year's audit was not finalised. The audit results for the other year were not available. The summary of audit results for the past five years is presented in Table 2.5.

Table 2. 5: Auditor General’s Reports (2018/19)

All values: R'000	<u>2019/20</u>	<u>2018/19</u>	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>
AUDIT OUTCOME	Audit results not available	Audit not finalised	Adverse audit	Qualified audit	Qualified

Source: Auditor General Report (2018/19)

2.3.4 (b) DrJSMLM service delivery performance outcomes

According to Performance Management Review Framework (2016/17) Dr J. S. Moroka Local Municipality is facing a lot of challenges related to service delivery. However, the municipality is striving to do everything in its power to ensure its communities get a good service as per the mandate. Table 2.6 is a summary of Dr. J. S. Moroka Local Municipality service delivery performance.

Table 2. 6: Dr. J. S. Moroka Service Delivery Summary 2013-2018)

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Do you think the municipality is responsible to deliver water?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has water infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Does the municipality actually provide water services?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is the service outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers to water service is provided	69 794	64 584	64 377	63 628	62 517
❖ Number of domestic households/delivery points	67 807	62 455	62 248	61 499	60 918
❖ Inside the yard	49 773	38 197	38 197	37 241	35 387
❖ Less than 200m from yard	3 714	3 951	3 744	3 951	3 744
❖ More than 200m from yard	14 320	20 307	20 307	20 307	21 787
❖ Domestic households with access to free basic service	5 500	4 394	4 387	1 383	1 360
2. Electricity					
❖ Do you think the municipality is responsible to deliver electricity?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has electricity infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide electricity?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is electricity service outsourced/commercialised?	Yes	Yes	Yes	Yes	Yes
❖ Number of households and non-domestic customers to which provided	66 235	64 377	64 377	61 399	55 195
❖ Domestic households with access to free basic service	5 500	4 394	4 387	1 383	1 360
3. Sewerage and Sanitation					
❖ Do you think the municipality is responsible to provide Sewerage and Sanitation?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has Sewerage and Sanitation infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide Sewerage and Sanitation service?	Yes	Yes	Yes	Yes	Yes
❖ Is Sewerage and Sanitation service outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	65 124	64 377	64 377	64 377	62 162

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
Number of households using:					
❖ Flush toilet - public sewerage	9 987	9 431	9 431	9 431	8 529
❖ Flush toilet - septic tank	1 491	1 381	1 381	1 381	1 157
❖ Ventilated pit latrine	52 008	52 321	52 321	52 321	51 232
❖ Bucket system	0	0	0	0	0
❖ Other	0	0	0	0	0
❖ Domestic households with access to free basic service	5 500	4 394	824	1 383	1 360
4. Solid Waste Services					
❖ Do you think the municipality is responsible to provide Solid Waste Services?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide Solid Waste Services?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide Solid Waste Services?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is Solid Waste Services outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	8 755	8 755	13 561	13 561	13 561
❖ Domestic households with access to free basic service	5 500	4 394	824	1 383	1 360

Source: Performance Management Review Framework (2018/19)

2.3.5 Overview of Elias Motsoaledi Local Municipality

Elias Motsoaledi Local Municipality (previously Greater Groblersdal Local Municipality) is located in Sekhukhune District of Limpopo Province and occupies a land area of 3 713km². This municipality is served by Groblersdal town.

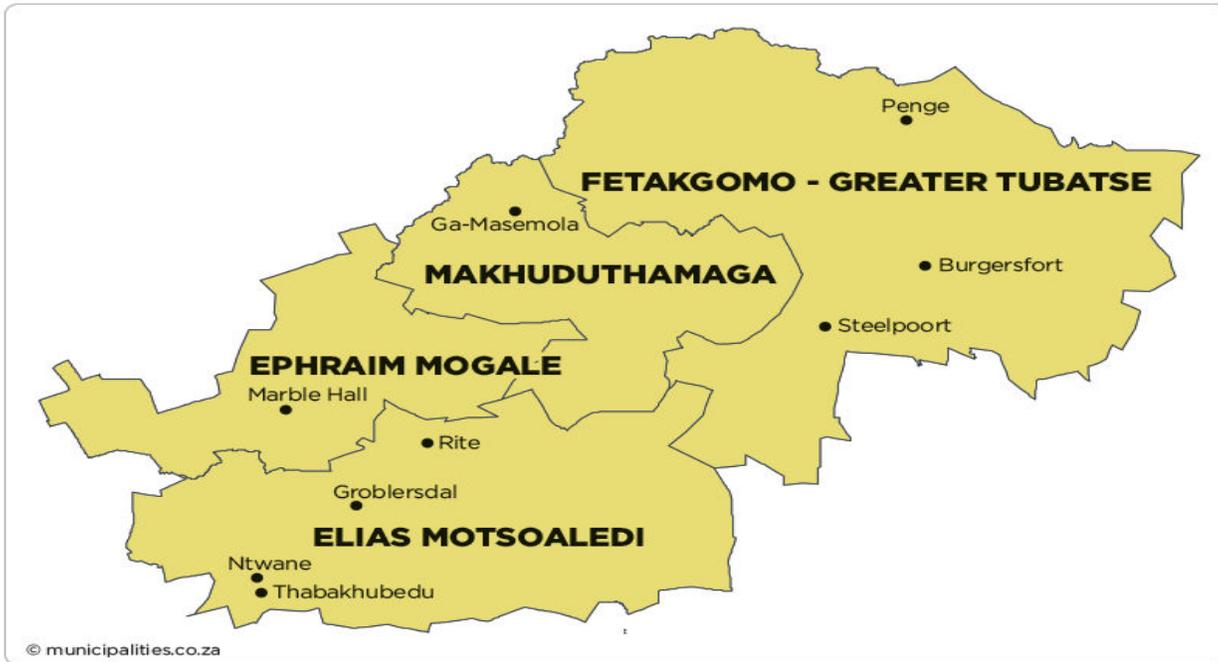


Figure 2. 3: Elias Motsoaledi Local Municipality (Adopted from Elias Motsoaledi Local Municipality Integrated Development Plan, 2016/17)

According to Elias Motsoaledi Local Municipality Integrated Development Plan (2016/17) the municipality is named in honour of the late Elias Motsoaledi, who was born in Sekhukhuneland, an activist in the South African Congress of Trade Unions and later served as a member of National Executive Committee of the ANC. He passed away on the day of the inauguration of the first democratic president of South Africa.

2.3.5 (a) Elias Motsoaledi municipal financial performance results

Audit outcomes for Elias Motsoaledi Local Municipality as reported by The Auditor General (2018/19) are indicated in Table 2.7.

Table 2. 7: Auditor General Reports Overview 2018/19)

All values: R'000	<u>2019/20</u>	<u>2018/19</u>	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>
AGSA AUDIT OUTCOME(S)	Audit results not available	Qualified audit	Financially unqualified	Qualified audit	Qualified audit

Source: Auditor General Reports (2018/19)

2.3.5 (b) EMLM service delivery performance outcomes

Elias Motsoaledi Local Municipality Integrated Development Plan (2016/17) suggested that this municipality performs on average performs well in certain areas such as electricity and sanitation. However, it has its own failures in providing other services. Table 2.8 below summaries service delivery overview for the local municipality.

Table 2. 8: EMLM Service Delivery Performance Outcomes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Do you think the municipality is responsible to provide water services?	No	No	Yes	Yes	No
❖ Do you think the municipality has water infrastructure?	Yes	Yes	No	No	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality actually provide water service?	No	No	No	No	No
❖ Is water service outsourced/commercialised?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	0	0	0	0	0
❖ Number of domestic households/delivery points	0	0	0	0	0
❖ Inside the yard	0	0	0	0	0
❖ Less than 200m from yard	0	0	0	0	0
❖ More than 200m from yard	0	0	0	0	0
❖ Domestic households with access to free basic service	0	0	0	0	0
2. Electricity					
❖ Do you think the municipality is responsible to provide electricity?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has infrastructure to provide electricity?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality provide electricity service?	Yes	Yes	Yes	Yes	Yes
❖ Is electricity service outsourced?	Yes	Yes	Yes	Yes	Yes
❖ Number of households and non-domestic customers to which provided	57 447	54 902	50 874	49 385	48 382
❖ Domestic households with access to free basic service	1 750	1 651	1 300	1 281	1 300
3. Sewerage and Sanitation					
❖ Do you think the municipality is responsible for sewerage and sanitation?	No	No	Yes	Yes	No
❖ Do you think the municipality has sewerage and sanitation infrastructure?	Yes	Yes	No	No	Yes
❖ Does the municipality actually provide?	No	No	No	No	No
❖ Is sewerage and sanitation service outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	0	0	0	0	0
Number of households using:					

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Flush toilet - public sewerage	0	0	0	0	0
❖ Flush toilet - septic tank	0	0	0	0	0
❖ Ventilated pit latrine	0	0	0	0	0
❖ Bucket system	0	0	0	0	0
❖ Other	0	0	0	0	0
❖ Domestic households with access to free basic service	0	0	0	0	0
3. Solid Waste Services					
❖ Do you think the municipality is responsible for solid waste services?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has solid waste infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality provides solid waste services?	Yes	Yes	Yes	Yes	Yes
❖ Is solid waste services outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	6 897	9 974	9 974	9 934	9 584

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Domestic households with access to free basic service	0	0	0	0	0

Source: Elias Motsoaledi Local Municipality Integrated Development Plan (2016/17)

2.3.6 Overview of Thembisile Hani Local Municipality (THLM)

According to Thembisile Hani Local Municipality Integrated Development Plan (2016/17) Thembisile Hani Local Municipality (Figure 2.4) is a Category B municipality, situated in Nkangala District of Mpumalanga Province, bordered by Dr JS Moroka in the north, Elias Motsoaledi in the north-east, Steve Tshwete in the east, Emalahleni in the south, and City of Tshwane Metro in the west and occupies a land area of 2 384km².



Figure 2. 4: Thembisile Hani Local Municipality (adopted from Thembisile Hani Local Municipality Integrated Development Plan (2016/17))

2.3.6 (a) THLM financial performance results

According to Auditor General Report (2018/19) the local municipality achieved qualified audits as well as unqualified audits between year 2015 and year 2020. Audit outcomes for these years are summed up in Table 2.9.

Table 2. 9: Thembisile Hani Local Municipality Auditor General Reports Overview

All values: R'000	<u>2019/20</u>	<u>2018/19</u>	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>
AGSA AUDIT OUTCOME(S)	Audit results not available	Qualified audit	Qualified audit	Financially unqualified	Qualified audit

Source: Auditor General Report (2018/19)

2.3.6 (b) THLM service delivery performance outcomes

Thembisile Hani Local Municipality Integrated Development Plan (2015; 2016; 2017; 2018 and 2019) reported on both failures and successes achieved by the local municipality between the years 2015 and 2020. Table 2.10 provides a summary of service delivery for the municipality over the stated years:

Table 2. 10: THLM Service Delivery Outcomes (2015-2020)

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Do you think the municipality is responsible to provide water services?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality has water infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide water service?	Yes	Yes	Yes	Yes	Yes
❖ Is water service outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	72 614	60 550	74 466	74 466	74 467
❖ Number of domestic households/delivery points	72 159	60 054	73 970	73 970	73 970
❖ Inside the yard	66 849	56 460	70 638	70 638	70 638
❖ Less than 200m from yard	3 693	2 463	2 281	2 281	2 281
❖ More than 200m from yard	1 617	1 131	1 051	1 051	1 051
❖ Domestic households with access to free basic service	56 558	57 108	8 245	8 245	8 245
2. Electricity					
❖ Do you think the municipality is responsible to provide electricity?	No	No	No	No	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality has electricity infrastructure?	No	No	No	No	No
❖ Do you think the municipality actually provide electricity?	No	No	No	No	No
❖ Is the electricity service outsourced?	Yes	Yes	Yes	Yes	Yes
❖ Number of households and non-domestic customers to which provided	73 925	73 925	73 925	73 925	73 925
❖ Domestic households with access to free basic service	5 589	5 590	8 245	8 245	8 245
3. Sewerage and Sanitation					
❖ Do you think the municipality is responsible for sewerage and sanitation?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has sewerage and sanitation infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide sewerage and sanitation?	Yes	Yes	Yes	Yes	Yes
❖ Is the sewerage and sanitation outsourced?	No	No	No	No	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Number of households and non-domestic customers to which provided	72 235	72 235	75 090	75 090	75 090
Number of households using:					
❖ Flush toilet - public sewerage	5 118	5 118	3 024	3 024	3 024
❖ Flush toilet - septic tank	1 242	1 242	3 686	3 686	3 686
❖ Ventilated pit latrine	15 642	15 642	15 942	15 942	15 942
❖ Bucket system	0	0	0	0	0
❖ Other	49 737	49 737	51 942	51 942	51 942
❖ Domestic households with access to free basic service	0	0	0	0	0
4. Solid Waste Services					
❖ Do you think the municipality is responsible for solid waste services?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has solid waste infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide solid waste services?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is solid waste service outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	74 822	74 822	74 822	74 822	74 822
❖ Domestic households with access to free basic service	0	0	0	0	0

Source: Thembisile Hani Local Municipality Integrated Development Plan (2016/17)

2.3.7 Overview of Emfuleni Local Municipality (ELM)

Emfuleni Local Municipality Integrated Development Plan (2016/17) records that Emfuleni Local Municipality is a Category B municipality, situated in the Sedibeng District of the Gauteng Province (Figure 2.5), covers the entire southern area of the Gauteng Province, extending along a 120km axis from east to west and is bounded by The Vaal River. Emfuleni shares boundaries with six (6) municipalities which includes the City of Johannesburg Metro to the north, Metsimaholo in the Free State to the south, Midvaal to the east, and Rand West City and JB Marks (in the North West Province) to the west and occupies a land area of 966km² (Emfuleni Local Municipality Integrated Development Plan, 2016/17)



Figure 2. 5: Map of Emfuleni Local Municipality (adopted from Emfuleni Local Municipality Integrated Development Plan, 2016/17)

The Emfuleni Local Municipality Integrated Development Plan (2016/17) further records that Emfuleni Local Municipality's rich in South African history, with heritage assets such as The Sharpeville Monument. The municipality is strategically located, and has a well-maintained road network – the N1 linking Johannesburg and Mangaung (Bloemfontein). Sasolburg forms the heartland of the municipality with its contribution of the iron and steel industry in South Africa. Its location is strategically positioned for many economic development and tourism (Emfuleni Local Municipality Integrated Development Plan, 2016/17).

2.3.7 (a) ELM financial performance results

As Reported in Auditor General Report (2018/19) the local municipality's audit reports over three consecutive years have been unqualified. Table 2.11 provides the audits report.

Table 2. 11: Auditor General Reports (2018/19)

All values: R'000	<u>2019/20</u>	<u>2018/19</u>	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>
AGSA AUDIT OUTCOME(S)	Audit results not available	Audit not finalised	Financially unqualified	Financially unqualified	Financially unqualified

Source: Auditor General Report (2018/19)

2.3.7 (b) ELM service delivery performance outcomes

Emfuleni Local Municipality Integrated Development Plan (2016/17) reported successes in almost every sector of service delivery (Table 2.12). Successes might be due to the fact that the municipality is a peri-urban local municipality that shares its borders with Johannesburg Metropolitan Municipality.

Table 2. 12: Emfuleni Local Municipality Integrated Development Plan

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
1. Water					
❖ Do you think the municipality is responsible for water service?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has water infrastructure?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality actually provide water services?	Yes	Yes	Yes	Yes	Yes
❖ Is water service outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	232 337	232 337	232 337	232 337	232 337
❖ Number of domestic households/delivery points	229 347	229 347	229 347	229 347	229 347
❖ Inside the yard	208 000	208 000	208 000	208 000	207 344
❖ Less than 200m from yard	19 747	19 747	19 747	19 747	20 403
❖ More than 200m from yard	1 600	1 600	1 600	1 600	1 600
❖ Domestic households with access to free basic service	72 388	34 413	38 389	37 556	41 125
2. Electricity					
❖ Do you think the municipality is responsible for electricity service?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality electricity infrastructure?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Do you think the municipality actually provide electricity?	Yes	Yes	Yes	Yes	Yes
❖ Is electricity service outsourced?	Yes	Yes	Yes	Yes	Yes
❖ Number of households and non-domestic customers to which provided	217 900	217 702	216 182	193 361	167 566
❖ Domestic households with access to free basic service	72 388	34 413	38 389	37 556	41 125
3. Sewerage and Sanitation					
❖ Do you think the municipality is responsible for sewerage and sanitation?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has sewerage and sanitation infrastructure to provide?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide sewerage and sanitation services?	Yes	Yes	Yes	Yes	Yes
❖ Is sewerage and sanitation service outsourced?	No	No	No	No	No

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Number of households and non-domestic customers to which provided	233 359	233 359	232 337	232 337	232 337
Number of households using:					
❖ Flush toilet - public sewerage	198 760	198 760	197 738	197 738	197 738
❖ Flush toilet - septic tank	4 350	4 350	4 350	4 350	4 350
❖ Ventilated pit latrine	1 842	1 842	1 842	1 842	1 842
❖ Bucket system	0	0	0	0	0
❖ Other	25 417	25 417	25 417	25 417	25 417
❖ Domestic households with access to free basic service	72 388	34 413	38 389	35 069	41 125
4. Solid Waste Services					
❖ Do you think the municipality responsible to provide?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality has solid waste infrastructure?	Yes	Yes	Yes	Yes	Yes
❖ Do you think the municipality actually provide solid waste?	Yes	Yes	Yes	Yes	Yes

	<u>2017/18</u>	<u>2016/17</u>	<u>2015/16</u>	<u>2014/15</u>	<u>2013/14</u>
❖ Is solid waste service outsourced?	No	No	No	No	No
❖ Number of households and non-domestic customers to which provided	220 887	220 887	220 887	220 887	220 887
❖ Domestic households with access to free basic service	72 388	34 413	38 389	35 162	41 125

Source: Performance Management Review Framework (2018)

2.4 Combined Conclusions from Section A and B

From the above literature review as explained in section A and B, an opinion that seems to emerge is that observations, deductions and arguments by the different scholars in the different periods, suggest that:

- (i) MC refers to all practices and attributes of the enterprise operator which have an influence on the firms' effectiveness and productivity. As such, it can include formal bookkeeping, inventory management, financial or strategic planning, pricing strategy, and also innovativeness;
- (ii) the literature review attempted to determine which proficiencies and practices can best represent Managerial Capital in the case of local municipalities;
- (iii) literature review has not been very conclusive on the skills sets that represent managerial capital in totality within the local government sphere given that the local government sphere is a relatively new environment currently being investigated, and to what extent these skills sets influence on sustainable service delivery (performance) is established at this point;

- (iv) from the literature review, evidence emerge which suggest that, in the context of local government, MC carefully refers to skills sets which includes experience, integrated risk management, knowledge management, municipal resource planning, project management, financial management, strategic management, public finance management, budgeting, supply chain management and corporate governance (Good Governance Report, 2019).

From the above observations and arguments, it can be settled that:

- (i) the local government sphere, specifically municipalities, require much more skills than firms / enterprises need. Hence management that is knowledgeable, experienced, skilled and in possession of the necessary proficiency in their various organization vocational areas are required in order to drive service delivery performance and the realization of municipality mandates;
- (ii) it is further clear that the maximisation of MC through ensuring compliance, accountability and adequate financial management can be regarded as critical requirements for continued local government performance that is necessary for its success towards sustainable service delivery to its citizens. According to the AGSA, SSD performance is achievable when the above indicators are consistently realized and optimised;
- (iii) it is argued in this study that failing to pay enough attention to the issue of human capital and more specifically MC could expose any municipality to significant risks (risks inherent in the municipality, financial risks, operational risks, residual risks, strategic risks, technological risks, regulatory risks, governance and ethics risks) whose impact may result in the municipality's inability to deliver vital sustainable services to its citizenry;
- (iv) it can be admitted that based on the observations and examination of the literature:
 - there is no direct evidence in literature to advocate that a relationship between MC and SSD exist or does not exist. Instead, this relationship can be determined through modelling and adaptation of production function variables that measures productivity as well as efficiency of a firm which are already known and identified;
 - similarly, municipal performance indicators which are a measure of SSD can be determined and adapted and computed statistically to regulate the nature and direction of the relationship between MC and SSD;

- It can be admitted in this study that no one to date (at least not as far as I can tell from the reviews undertaken) has tested the relationship between managerial capital and sustainable service delivery in municipalities;
- it can be further admitted that there exists similar literature by various scholars which emphasizes the value of human resources as it constitutes the ultimate basis of the wealth of nations;
- literature settles that capital and natural resources constitute passive factors of production, while human beings are regarded as active agencies who accumulate capital, exploit natural resources, build social, economic, and political organizations, and carry forward national development;
- in as far as the relationship between managerial capital and sustainable service delivery, there exist literature gaps which requires the identification of corresponding variables that influences municipal performance, which constitute sustainable service delivery in the context of this study. The literature gaps identified in as far as the relationship between MC and SSD are concerned stems from the fact that there has been extensive work done on sustainable service delivery but not extensive work to test MC in the local government sphere has been done.

According to the Good Governance Report (2019), the local government sphere is still new, developing and the performance of municipalities is a significant measurement indicator of local governance. Hence, the Auditor General of South Africa (AGSA) conducts consistent audits of municipalities to evaluate their overall performance in as far as adherence to internal audit control targets for municipalities underpinned by three (3) principles which embody good governance, that is, accountability, compliance and proper financial management. These internal controls allow for accountability at the grassroots level of democracy, provincial sphere and at the national sphere of government to be upheld.

Good governance which is a measure of SSD in the main, indicates that citizens have an active voice in their municipal area in terms of how they are governed and that there is fair and democratic

participation by citizens, civil society and political structures in the affairs of their respective municipalities.

It can be concluded that Chapter 2 overall, gave an overview of the municipalities that form the sample population of the study. The descriptions of municipalities presented have been extrapolated from the Integrated Development Plans of the individual municipalities in the population as well as from the Performance Management Review Framework and Annual Performance Reports over the period of 2015 to 2020. The Auditor General Reports for the subsequent years has been used as a descriptor of the municipal financial standings. The literature review chapter as outlined has laid a foundation for data collection and analysis which are described in detail in Chapter 3 and 4.

CHAPTER 3– RESEARCH METHODOLOGY

3.1 Introduction

The study focus examines the nature of relationship that exists between Managerial Capital and sustainable service delivery in local municipalities. In its simplest form, MC provides input variables which translate to indicators whose outcomes indicates SSD. SSD in the main represent an overall output variable. This was done through consideration of Managerial Capital forms as input variables and service delivery types as output variables. The two types of variables were subjected to the Cobb Douglas production function relationship calculation to determine the relationship that exist in them.

The research was conducted as a case study across six (6) municipalities, and collection of data through site document analysis. Secondary data was collected through analysis of Treasury Reports and Auditor General's Reports on performance of the individual municipalities. This mixed research methods empirical study aimed to investigate and meet the objectives that answers the research questions of the study. These constructs such as the different mixed research methods; case studies, and data analysis are unpacked in this chapter together with the research process as well as the limitations of the study.

3.2 Research methodology

The current study has taken the form of a quantitative research methods. According to Bryman (2012), quantitative research is a research strategy that focuses on quantification in the collection and analysis processes. Quantitative methods use deductive approach and applies statistics to measure various parameters and test or validate hypotheses. Quantitative methods are based on objective measurements of variables, are well structured and are based on positivistic approach (Richardson, 2012). There are numerous benefits of use of quantitative methods. Some of these are that the findings from quantitative approaches are generalisable to a large population, it is easy to analyse and data is less time consuming as it uses various software applications that are user

friendly, credible and has comprehensive toolkits. These benefits motivated the researcher to opt to use this approach at the expense of qualitative approach which is subjective and has tedious data collection and analysis processes. However, the researcher was cognisant of the downside of the quantitative research approach which are that this method is devoid of in-depth information and it fails to account on how social reality is shaped and contextualised and has tendency of taking a snapshot of a phenomenon under investigation (Bouwer, Béguin, Sanders and van den Bergh, 2015).

3.3 Research design

The current study was organised as case study of six (6) municipalities. According to Creswell (2014) a case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme, or system in a real-life context. In this study the case study involved six (6) municipalities which are Dr J.S Moroka Local Municipality (DrJSMLM) and Thembisile Hani Local Municipality (THLM) of Nkangala District in Mpumalanga Province, Emfuleni Local Municipality in Sedibeng District Gauteng, Madibeng Local Municipality in Bojanala District of the North West Province and Ephraim Mogale as well as Elias Motsoaledi Local Municipality of Sekhukhune District in Limpopo Province of the Republic of South Africa.

According to Simons (2009), case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme, or system in a real-life context. Creswell (2014:14) and Cook & Kamalodeen, (2019:10) concurred in viewing case study as a design inquiry found in many fields, especially evaluation, in which the researchers develop in-depth analysis of the case, often a programme, event, activity, process or, one or more individuals. This study focused on an in-depth empirical analysis of a relationship between MC and SSD in local municipalities. This case study was of exploratory in nature which according to Yin (2014) explores phenomena in relation to factors that influence it. In this case the phenomena were sustainable service delivery and the factors that were hypothetically assumed to be influencing it were related to Managerial Capital.

The study was organised as a quantitative research methods case study research. According to Cook & Kamalodeen, (2019 17- 18) a mixed methods case study research is a type of mixed methods study in which the quantitative and qualitative data collection, results, and integration are used to provide in-depth evidence for a case(s) or develop cases for comparative analysis. According to Creswell & Clarke, (2018:116) in an exploratory type of a mixed methods case study research phenomena is explained through results drawn from qualitative data collection and analysis tested or applied by results connected to and build to interpretation quantitative measure derived from empirical computation of data.

3.4 Sample population of the study

Lewis (2015:33) noted that in an investigation it is impossible to access every single element of a population so a group of people (smaller in number than the population) is selected for the assessment. In the context of this study, the population includes Category B local municipalities around Gauteng province in South Africa. Based on this, the population of the study is estimated at eight (8).

It is uneconomic to consider the entire population as it is time consuming and requires considerable amount of resources. For this reason, a sample of the population is used in a research study. According to Pool & Laubscher (2016:133) a suitable sample must fulfil the principles of impartiality, efficiency, and representativeness. Impartiality is achieved by way of the method of sample selection adopted by the researcher. Hollstein (2016:16) distinguished between probability samples, which are based on probability theory, and improbability samples, which are not based on non-probability theory. He listed samples based on probability as being simply random, stratified, systematic and aggregate samples According to Almalki (2016) probabilistic samples are selected at the discretion of researchers.

The selection of an improbability sample is not based on probability theory. Pool & Laubscher (2016:137) noted that the most frequently used improbability samples are the occasional specimens, passers-by, nearby organisations, and members of those organisations and individuals, which in the researcher's opinion are the best fit and contribute to the implementation of research. According to

Etikan (2017:43) two categories of improbability sampling are convenient and purposive sampling. He further asserted that convenient sampling is a sample whose participants are easy or convenient to approach.

Etikan (2017:41) defined a sample as a portion of a population or universe. He further argued that a sample could also refer to the total quantity of the things or cases, which are the subject of our research. There are different types of sampling but this study chose purposive sampling.

3.5 Purposive sampling

Purposive sampling was used to select the sample of the study. According to Etikan (2017:41) purposive sampling is a technique that relies on the deliberate choice of the sample due to the qualities the sample possesses. Proximity to the researcher, accessibility and show of interest of the management from the portion of the population were important considerations in this study. All the chosen municipalities are of category B type which are mainly rural. According to the Constitution of south Africa (1996) category B municipalities are municipalities that municipality executive and legislative authority in its area with a category C municipality within whose area it falls. This study considers Category B municipalities to be directly connected with the citizens that they serve. The study which involves this category of municipalities provides a measure of sustainable service delivery because of their proximity to the citizens, needs in terms of constitutional provisions and ruralness.

Six (6) municipalities make up the sample population of the study. Dr J.S Moroka Local Municipality (DrJSMLM) and Thembisile Hani Local Municipality (THLM) of Nkangala District in Mpumalanga Province, Emfuleni Local Municipality (ELM) in Sedibeng District Gauteng, Madibeng Local Municipality (MLM) in Bojanala District in North West Province and Elias Motsoaledi (EMLM) and Ephraim Mogale Local Municipalities (Ephraim MLM) of Sekhukhune District in Limpopo of the Republic of South Africa due to their close proximity to the researcher were identified as appropriate samples of the study.

3.6 Data collection

In this study, secondary data sources that included audited annual reports, service delivery business implementation plans, audited financial statements, IDP's, MFMA, PFMA, DRA, consolidated general reports were used to gather relevant information. The information that was considered consisted of Financial Management (which was measured in terms of budget, expenditure and revenue), Corporate Governance (which was measured in terms of community participation, council meetings, conflict of interest disclosure and integrated risk management), Knowledge Management (which was measured in terms of Annual Employee Training Sessions, Number of Employees Trained, Competency Levels), Municipality Resource Planning (which was measured in terms of Number of jobs created, Number of Planning Meetings held, Number of SMME's /Bursary students supported and supplier development budgets).

Financial Management, Corporate Governance, Knowledge Management and Municipality Planning (these are all independent variables of the study) were preferred measures of performance since these variables are often assessed by AG in the MFMA audit performance outcomes and are common to the 6 local municipalities that were sampled in this study. These Category B local municipalities included Dr JS Moroka, Madibeng, Emfuleni, Thembisile Hani, Ephraim Mogale, Elias Motsoaledi.

Service delivery data (which is the dependent variable in this study) was measured in terms of basic services such as water, electricity, refuse removal, sanitation and social package (free services to the under privileged). This data on service delivery was also gathered from the same sources listed above. All the above data was gathered for a 5-year period.

3.7 Data analysis

This study was quantitative in nature and its main purpose was to determine the nature and influence of managerial capital on service delivery within local municipalities in South Africa and was guided by the Cobb's Douglas production function. This function in its simpler form has two independent

variables and associated indices (alpha and beta) that measure input share of each variable. The dependent variable in this context was the Sustainable Service Delivery while Financial Management, Corporate Governance, Knowledge Management and Municipality Planning were independent variables. Four independent variables were measured in this study. However, in order to be guided by Cobb's Douglas production function, and demonstrate the influence of managerial capital on service delivery, only two variables are expected. Factor analysis was primarily used for objective variable reduction.

According to Le, Schmidt, Harter and Lauver (2010), factor analysis is a data reduction technique that is performed when a researcher does not want to include all of the original measures in analyses. Therefore, factor analysis is used to come up with small number of components that can account for the variability found in a comparatively large number of measures. The idea with the use of factor analysis in this case is to determine the two critical variables that are essential in defining service delivery. Correlation analysis was used to demonstrate pairwise associations between Financial Management, Corporate Governance, Knowledge Management and Municipality Planning. The essence of the application of correlation analysis was to ascertain any redundancies which are indicated by high correlation coefficients that are above 0.79 (Lloret, Ferreres, Hernandez and Tomas, 2017). After factor analysis, basic descriptive statistics such as mean, standard deviation, confidence interval and Analysis of Variance were applied in order to have a clearer understanding of how each municipality performs.

In order to suit the Cobb's Douglas production function, data was first transformed using logarithmic function. The transformed data was subjected to regression analysis where service delivery was the dependent variable while the most critical two variables (results from factor analysis) were independent variables. At this stage, the regression model provided, the constant as well as the appropriate indices corresponding to the independent variables used.

3.8 Limitations of the study

The research presents several challenges and highlights some shortcomings. The lack of formal evaluation reports of individual municipalities and initiatives makes assessing their level of success

difficult. A lack of baseline data at municipal level also makes it difficult to monitor and evaluate whether past human capital development interventions have proved to achieve their intended outputs, outcomes and impact. Furthermore, high levels of mobility among municipal officials into and out of the institutions make it difficult to monitor the impact of improved service delivery initiatives.

Despite an increase in the availability of financial resources for service delivery from National Treasury, municipalities continue to face challenges in accessing these services. These may include time, geographical location, information, grant restrictions, content relevancy and consultants or new recruits in the form of skilled officials who are unfamiliar with the local government sector. Service delivery initiatives differ from municipality to municipality. It is an on-going and incremental process, which requires a sustained, flexible and holistic approach to ensure success over time.

3.9 Ethical considerations in the research

In carrying out this study, it is envisaged that the respondents may misconstrue the intentions or purpose of the study. They may feel it is intended to expose their inadequacies. This may make them reluctant to supply needed primary data, which may invariably affect both the duration of the research and the research results or outcome. It is therefore critical to take cognisance that the research process abide to ethical principles of informed consent, participant's right to privacy, confidentiality and cultural sensitivity amongst others.

However, the researcher intends to reduce or eliminate the above limitations by explaining the purpose of the study to the accounting officers at the respective municipalities and make them know how they could benefit from it.

3.10 Conclusion

Chapter 3 described the research design and methodology. The chapter described the research as being a mixed research method that is much skewed towards quantitative research method.

Qualitative part of the study is only used to describe results emerging from the quantitative data. Also described in this chapter is how the study will employ the case study where all municipalities under study form a single case study that will be used to explore the relationship between Managerial Capital and Service delivery. The use of several municipalities seeks to ensure validity and transferability of the results. The chapter also briefly described how data was analysed.

CHAPTER 4 – PRESENTATION OF RESULTS AND FINDINGS

4.1 Introduction

Chapter 4 presents results and findings of the study. The relevant analysis technique used in this chapter is informed by research methodology that was covered in chapter 3. In particular, Chapter 4 is based on the data analysis methods that was comprehensively dealt with in the previous chapter. The appropriate analysis method used in this chapter helps to achieve the research questions of the study which were as follows;

- What is the structural configuration of managerial capital that yields enhanced service delivery outcomes in local municipalities in South Africa?
- What is the association between managerial capital and service delivery in local municipalities in South Africa?
- What is the magnitude and direction of the contribution of each managerial capital component to enhance service delivery within local municipalities in South Africa?
- What recommendations could be provided to improve sustainable service delivery?

This chapter presents results of the data on the influence of Managerial Capital (MC) on service delivery within municipalities. A total of six (6) category B municipalities in South Africa were considered. These included two (2) municipalities in Mpumalanga Province, two (2) municipalities in Limpopo Province, one (1) in North West Province and Gauteng Provinces.

The quantitative data of the study was gathered from secondary sources that included municipalities' strategic plans, policies, annual reports and financial performance information published independently by public sources such as Department of National Treasury (Municipalities Annual Reports), Statistics South Africa (The Gaffney Local Government Yearbook 2013-2018) and Auditor General of South Africa (Consolidated Reports on Local Government Audit Outcomes), were considered. The results of this chapter form a foundation for the analysis, discussion, conclusion, recommendations as well as the scope for further research that are covered in chapter 5 and 6 respectively.

4.2 Results and Findings of the study

4.2.1 Factor analysis

Factor analysis was used to reduce the number of variables that can be used for the final analysis in a study. Prior to use of factor analysis, it was advisable to check the appropriateness of the use of factor analysis. This is usually dependent on the nature of data presented. KMO and Bartlett's Test of sphericity was used to test the relevance of the use of factor analysis (as shown in Table 4.1). It was observed that Kaiser-Meyer-Olkin Measure was more than a standard threshold of 0.8. This means that the sampling is adequate and that factor analysis is applicable to identify various factors under consideration.

Table 4. 1: KMO and Bartlett's Test of sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.802
Bartlett's Test of Sphericity	Approx. Chi-Square	128.606
	df	6
	Sig.	.000

The idea of using factor analysis in this study is to determine significant factors that define service delivery within municipalities. Four independent variables were considered in the study. These included Financial Management, Corporate Governance, Knowledge Management and Municipality Planning. Only the above variables were chosen for the study as these were easily available from source documents and objectively quantifiable.

The above were subjected to factor analysis using Principal discriminant analysis (SpSS software application) to identify critical factors of the study. Correlation analysis was performed and the results are shown in Table 4.2. It is observed that Knowledge Management (KM) and Municipality Planning (MP) were highly associated with a correlation coefficient of +0.995 ($p < 0.01$). This means that

Knowledge Management (KM) and Municipality Planning (MP) are to a large extent measuring the same attributes.

Therefore, one of the two factors can be discarded as it is redundant. In this case, Municipality Planning (MP) was discarded in favour of Knowledge Management. Therefore, at this stage, the study has three independent variables that include Financial Management, Corporate Governance, Knowledge Management which are further subjected to factor analysis. The correlation coefficients between all the remaining variables were less than 0.5 (not high). This confirms that these remaining variables are measuring different aspects (no duplication/redundancy).

Based on the correlation analysis in Table 4.2, it can be observed that there is a positive but modest association between service delivery and Corporate Governance ($r = 0.216$; $p > 0.05$). It demonstrates that there is a misalignment between service delivery and Corporate Governance systems that needs oversight attention of the executive management within municipalities. There is also a positive but weak association between service delivery and Municipality Planning ($r = 0.114$; $p > 0.05$). Again, this shows a mismatch between service delivery parameters and Municipality Planning systems in the municipalities. More attention by senior management within municipalities is required to synchronize systems.

Table 4.2 indicates that there is a positive but weak association between service delivery and Financial management ($r = 0.185$; $p > 0.05$). more direct intervention mechanisms are desirable from senior management level of the municipalities to ensure that there is appropriate alignment between service delivery and Financial management. The results in Table 4.2 demonstrates that a positive but weak association between service delivery and knowledge management ($r = 0.118$; $p > 0.05$). This further shows that there is lack of effective alignment between service delivery and knowledge management systems.

Table 4. 2: Correlation analysis to determine association between variables of the study

		Service Delivery	FM	CG	KM	MP
Service Delivery	Pearson Correlation	1	.185	.216	.118	.114
	Sig. (2-tailed)		.327	.251	.536	.550
	N	30	30	30	30	30
FM	Pearson Correlation	.185	1	.334	-.040	-.034
	Sig. (2-tailed)	.327		.071	.836	.860
	N	30	30	30	30	30
CG	Pearson Correlation	.216	.334	1	.084	.087
	Sig. (2-tailed)	.251	.071		.660	.647
	N	30	30	30	30	30
KM	Pearson Correlation	.118	-.040	.084	1	.995**
	Sig. (2-tailed)	.536	.836	.660		.000
	N	30	30	30	30	30
MP	Pearson Correlation	.114	-.034	.087	.995**	1
	Sig. (2-tailed)	.550	.860	.647	.000	
	N	30	30	30	30	30

** . Correlation is significant at the 0.01 level (2-tailed).

The total variance explained by each factor is as shown in Table 4.3. In this case, a variable with an Eigen value of more than 1 has a significant contribution. It is observed in Table 4.3 that Financial Management recorded a high Eigen value of 2.010 (way above a threshold of 1.00), Corporate Governance recorded an Eigen value of 1.33 as shown. This means that both Financial Management and Corporate Governance have significant contributions on service delivery and explain total variability of 83.05%. However, Knowledge Management and Municipality Planning recorded low Eigen values that were less than 1 and had a combined contribution of less than 17% as shown in Table 4.3. This confirms that Knowledge Management and Municipality Planning are not so significant measures for service delivery.

Table 4. 3: Determination of critical factors using total Variance explained

Elements	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
FM	2.010	50.246	50.246	2.006	50.157	50.157
CG	1.330	33.258	83.504	1.334	33.347	83.504
KM	.655	16.377	99.882			
MP	.005	.118	100.000			

Extraction Method: Principal Component Analysis.

Loading factors were computed as shown in Table 4.4. As a rule of thumb, variables with factor loadings of at least $|0.5|$ (meaning $\geq +.5$ or $\leq -.5$) are considered significant and important in the study. In this case, Financial Management and Corporate Governance recorded high factor loadings that were above the threshold. Knowledge Management and Municipality Planning recorded low factors of 0.495 that were lower than the threshold. This means that Knowledge Management and Municipality Planning are not very critical in this demonstration. Therefore, only Financial Management and Corporate Governance were critical variables defining service delivery.

Table 4. 4: Determination of critical factors using factor loadings

	Component	
	1	2
FM	-.054	.617
CG	.037	.608
KM	.497	-.009
MP	.497	-.005

Factor analysis extracted 2 components as shown in Figure 4.1. It is observed that Financial Management and Corporate Governance significantly loaded on component 2 with loadings of 0.617 and 0.608 respectively. On the other hand, Knowledge Management and Municipality Planning loaded on component 1 with similar factor loadings of 0.495.

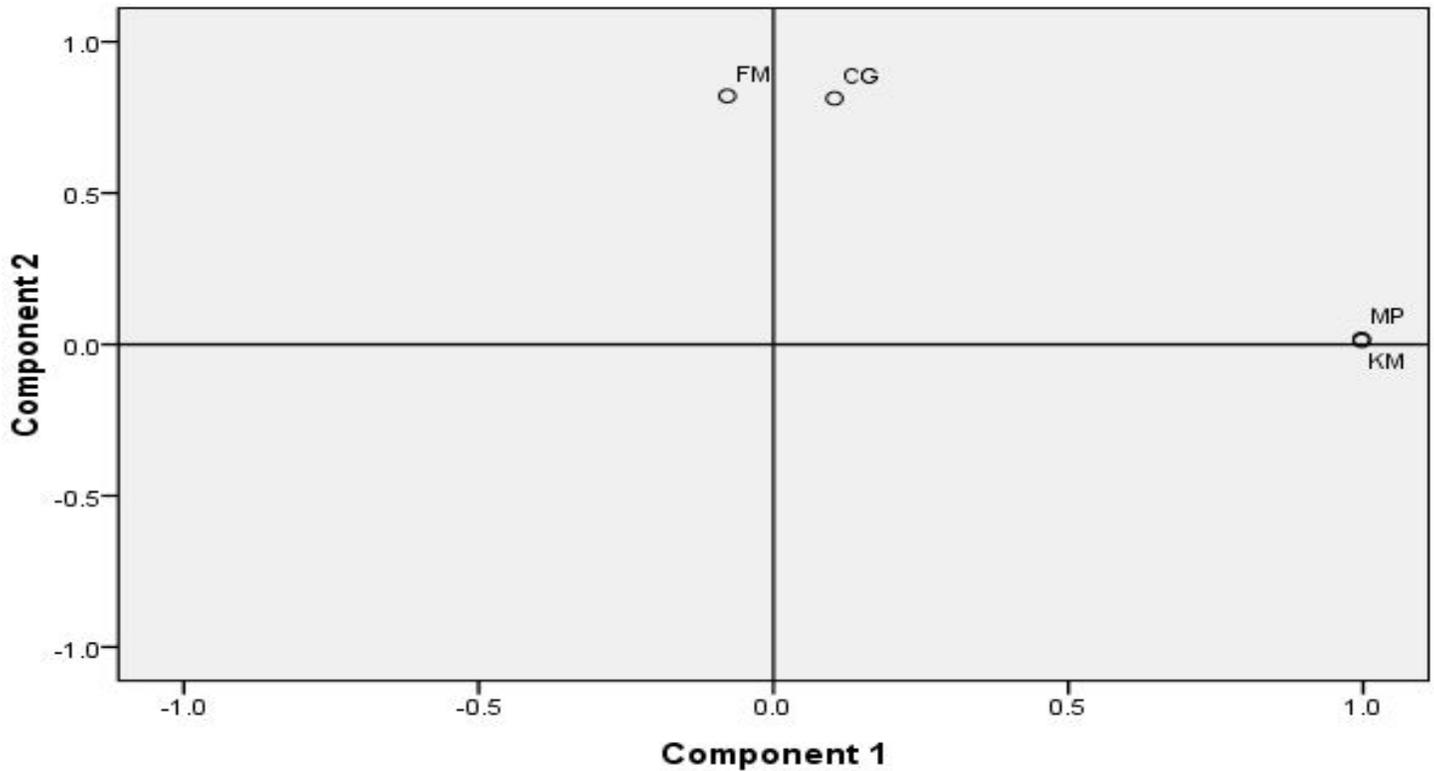


Figure 4. 1: Variable loadings along component scale

4.2.2 Preliminary analysis

In order to have an understanding of the performance of each municipality considered, descriptive statistics were performed as shown in Annexure 1. Weighted mean scores for Financial Management, Corporate Governance, Knowledge Management and Municipality Planning were used. The weights were calculated using five-year data of all the municipalities on the variables under study. Based on this, it is observed that Elias Motsoaledi local municipality outperformed the other five municipalities with the highest mean score of 5684.9 in service delivery while Madibeng came second in this with a mean score of 2468.2. Emfuleni came third, while Thembisile Hani and Ephraim Mogale local municipalities came fifth and sixth with mean scores of 184.73 and 114.11

respectively. Figure 5.2 compares the service delivery performance of the above-mentioned municipalities in graphical presentation.

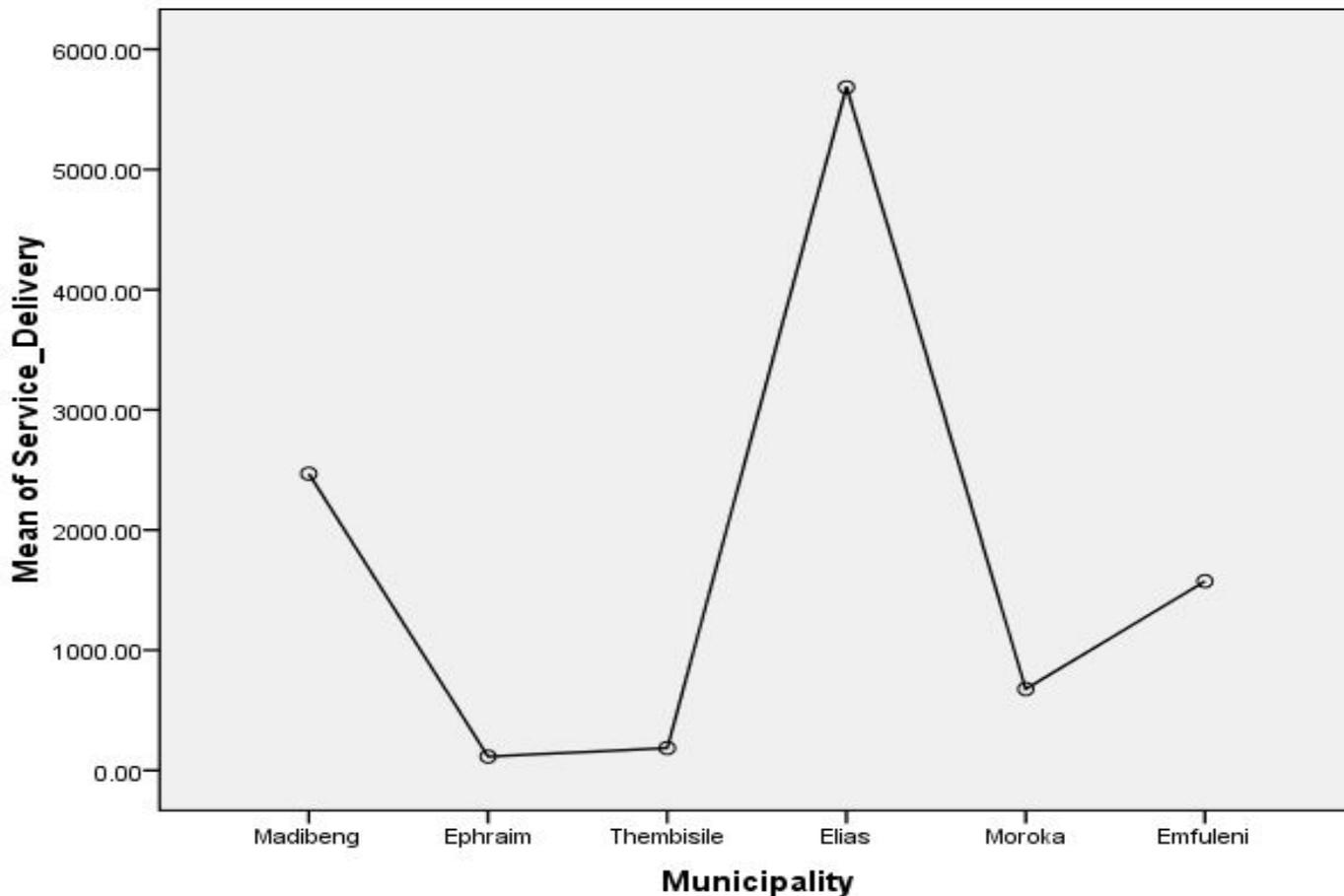


Figure 4. 2: Service delivery performance of local municipalities

Figure 4.3 shows the performance of local municipalities with respect to Financial Management (FM). In this regard, Emfuleni local municipality came first with the highest FM score of 18212.0 while Dr JS Moroka came second with a mean score of 7926.1. The good performance of Dr JS Moroka and Emfuleni local municipalities are as expected due to the provisional and national interventions that has been instituted in the period under study. Ephraim and Thembisile Hani local municipalities came third, fourth and fifth respectively. Elias Motsoaledi came last with a mean score of 4594.4. Even though Elias Motsoaledi performed well on service delivery, it ranked last on financial management due to inadequate funding from the national government.

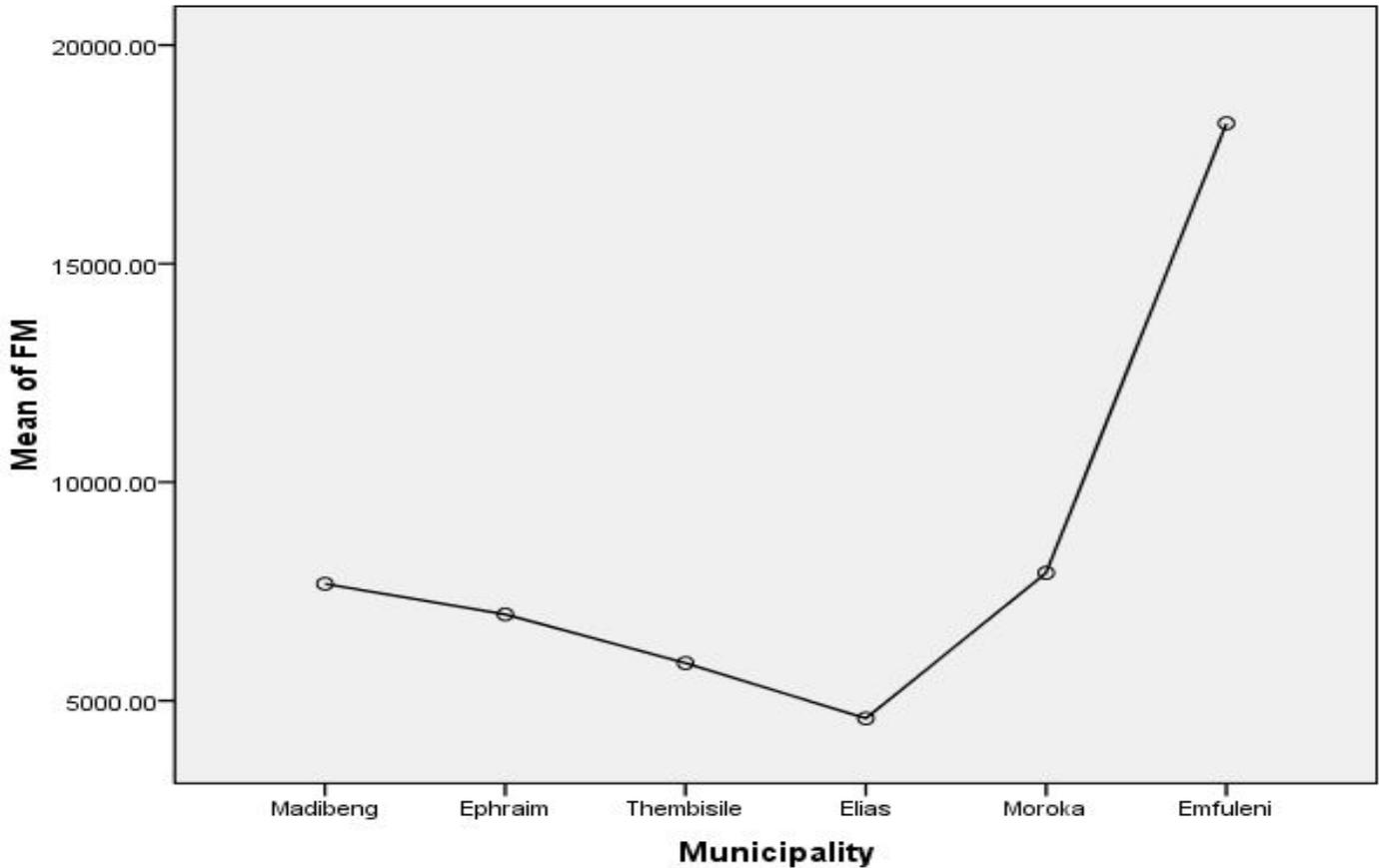


Figure 4. 3: Financial Management performance of local municipalities

The performance of local municipalities with respect to Corporate Governance is demonstrated in Figure 4.4 as well as in Annexure 1. It is observed that Emfuleni had the highest favourable mean score of 1.45 while Elias Motsoaledi and Madibeng local municipalities came second and third with mean scores of 0.89 and 0.82 respectively. The good performance of the above local municipalities is attributed to interventions that have been instituted which are meant to ensure that better corporate governance systems are in place and are enforced at all times. Ephraim and Dr JS Moroka were ranked fourth and fifth respectively while Thembisile Hani local municipality had an unexpectedly low score of 0.00 in Corporate Governance. This is largely due to no data available for analysis on Corporate Governance. In the case of available data, a different scenario on Figure 4.4 is more likely to emerge.

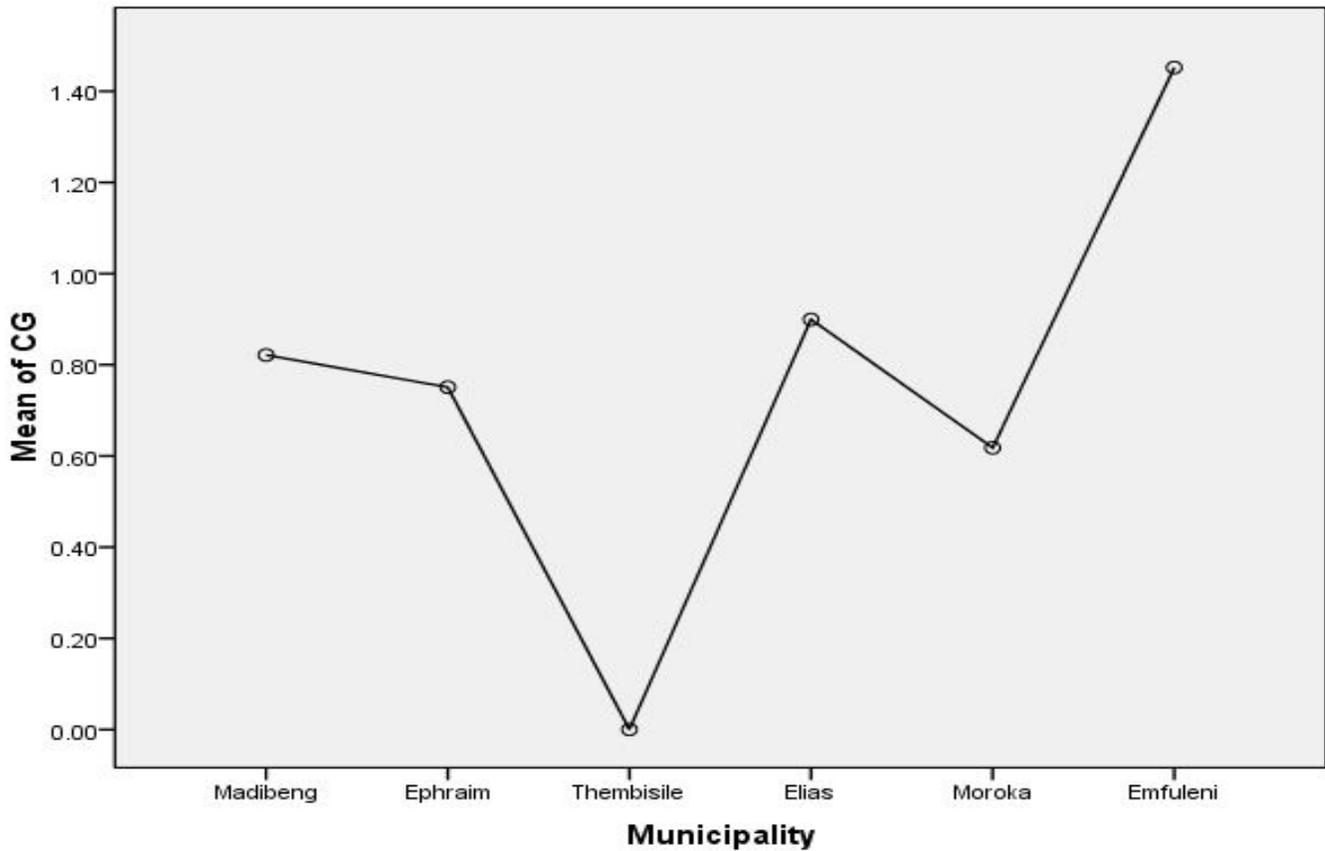


Figure 4. 4: Corporate Governance performance of local municipalities

The performance of local municipalities with respect to Knowledge Management is demonstrated in Figure 4.5 as well as in Annexure 1. Based on the data used in the study, it is observed that Madibeng local municipality was ranked first with a favourable mean score of 85501 while Ephraim local municipality was the second with a mean score of 7.05. The remaining municipalities recorded very low mean scores that were less than 1 on Knowledge Management. This can be attributed to low competency levels in critical skills areas, small number of training sessions allocated for training as well as low number of employees who get trained to develop capacity for service delivery.

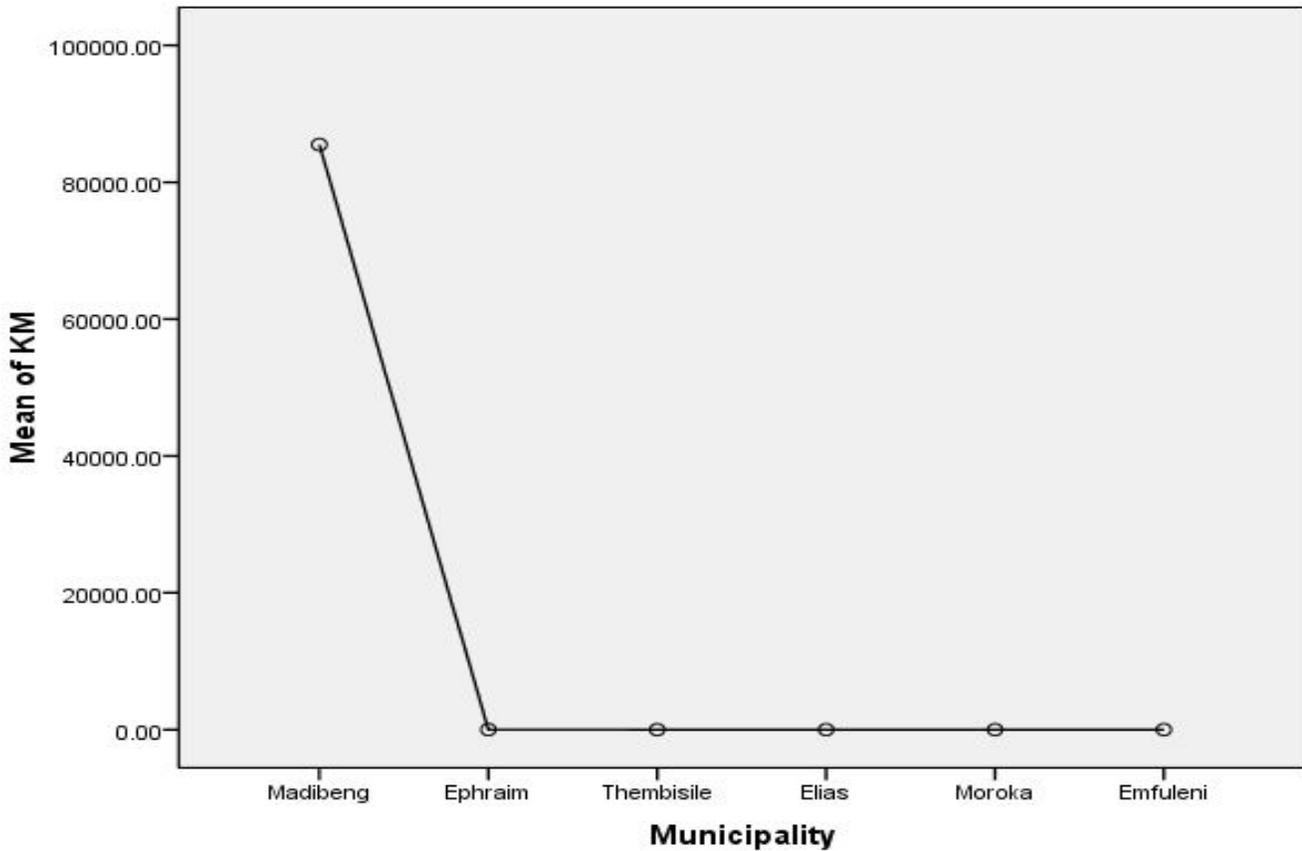


Figure 4. 5: Knowledge Management performance of local municipalities

4.2.3 Inferential analysis of data

Inferential statistics such as correlation analysis, analysis of variance and multiple linear regression were applied in order to answer the main research questions of the study. The analysis is based on the secondary data that was gathered from various source documents highlighted above. All this analysis was performed in SpSS software application.

Performances of municipalities on Financial Management, Corporate Governance, and Knowledge Management were compared using Analysis of Variance (ANOVA) as shown in Table 4.5. Municipality Planning was dropped in the final analysis due to redundancy. Prior to use of ANOVA, a test of Homogeneity of Variances using Levene's statistic was performed as shown in Table 5.6.

It is observed that all the variables were significant ($p < 0.05$). This indicates that the sample populations were heterogenous in nature so are the variances.

Table 4. 5: Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Service Delivery	31.369	3	26	.000
FM	3.863	3	26	.021
CG	5.220	3	26	.006
KM	28.541	3	26	.000
MP	24.503	3	26	.000

Analysis of variance is shown in Table 4.6 indicates that there are significant differences between municipalities on service delivery. In this case, Elias Motsoaledi and Madibeng were high performers with high mean scores of 5684.9 and 2468.2 respectively. However, Thembisile Hani and Ephraim Mogale local municipalities recorded low mean scores of 184.73 and 114.11 respectively. Again, ANOVA in Table 5.6 indicates that there are significant differences between municipalities on financial management. Emfuleni and Dr JS Moroka were high performers with high mean scores of 18212.0 and 7926.1 respectively. However, Thembisile Hani and Elias local municipalities recorded low mean scores of 5859.8 and 4594.4 respectively.

Analysis across municipalities shows that there are significant differences on corporate governance. Madibeng and Ephraim Mogale local municipalities were high performers with high mean scores of 0.821 and 0.751 respectively. On the other hand, JS Moroka and Thembisile Hani recorded low mean scores of 0.618 and 0.00. Table 5.6 indicates that there are significant differences on knowledge management across municipalities. Madibeng and Ephraim Mogale local municipalities were high performers with high mean scores of 85501.0 and 7.050 respectively. On the other hand, Emfuleni and JS Moroka and recorded low mean scores of 0.3448 and 0.2574. There is generally a lack of consistence across municipalities on the variables that were considered above. This can be due to difference in data quality and inherent differences in the characteristics of the municipalities which are defined in term of systems, funding, competencies, exposure to risk among other things.

Table 4. 6: Comparisons of municipalities using ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Service Delivery	Between Groups	1.115E8	5	2.230E7	12.149	.000
	Within Groups	4.406E7	24	1835745.158		
	Total	1.556E8	29			
FM	Between Groups	5.994E8	5	1.199E8	13.749	.000
	Within Groups	2.093E8	24	8719159.230		
	Total	8.087E8	29			
CG	Between Groups	5.500	5	1.100	7.497	.000
	Within Groups	3.521	24	.147		
	Total	9.021	29			
KM	Between Groups	3.046E10	5	6.092E9	17.420	.000
	Within Groups	8.393E9	24	3.497E8		
	Total	3.885E10	29			

4.2.4 Multiple linear regression

Cobb's Douglas function with two variables was used as guide to the study. This model has a dependent variable as well as two independent variables in the following form;

$$Q = A. L^{\alpha}. K^{\beta}$$

In the context of the study, service delivery is the dependent variable while FM and CG are independent variables. Cobb's Douglas function is modified to be applicable to local government environment and assumed the following notation;

$$SD = MC. FM^{\alpha}. CG^{\beta}$$

It should be noted that the above function is limited to two independent variables as other variable were found not to be significant using factor analysis above. Part of the aim of the study is to determine the coefficients alpha and beta in the above function. The data was primarily transformed using logarithm function to linearize the function. Thereon, multiple linear regression was performed to determine the above unknowns. The transformed service delivery variable was indicated as LnSD

and other transformed variables followed the same notation (e.g. LnFm, LnCG). The results of the multiple linear regression are shown in Table 4.7.

Table 4.7 indicates that service delivery is positive and significantly ($p < 0.05$) predicted by two variables that include Financial Management and Corporate Governance. The standard coefficients of the two independent variables are positive, illustrating a favourable relationship that drives service delivery in the right direction. The constant in this regression model is 8.51. This means that service delivery can be magnified by other factors such as outsourced skills, experience, creativity and innovation. All these are factors of MC.

Table 4. 7: Determination of relationship between variables using regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	8.509	3.282		2.593	.017
LnFm	.628	.101	1.710	5.221	.000
LnCG	.570	.218	.354	2.609	.017

a. Dependent Variable: Ln_SD

The contribution of each variable in driving service delivery was performed using standard beta values from the regression model (as shown in Table 4.8). It is observed that Financial Management has a significant contribution (82.8%) in driving service delivery while Corporate Governance contributes about 17.2%. This is consistent with local government environment wherein Corporate Governance issues include oversight by executive management level who are not involved in the day to day running of the operations. More involvement of oversight above 20% can be viewed as interference of executive.

Table 4. 8: Determination of alpha and beta coefficients

Variable	Standard beta	Contribution	% Contribution
FM	1,710	0,828	82.8
CG	0,354	0,172	17.2
Total	2,064	1,000	100

Analysis of Variance (shown in Table 4.9) was performed to validate the regression model above. It can be observed that the regression is significant ($p < 0.005$). This means that service delivery is adequately predicted by Financial Management and Corporate Governance.

Table 4. 9: Determination of model adequacy using ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	30.507	4	7.627	8.844	.000
Residual	17.247	20	.862		
Total	47.754	24			

b. Dependent Variable: Ln_SD

4.3 Conclusion

The study started with four variables that included Financial Management (which was measured in terms of budget, expenditure and revenue), Corporate Governance (which was measured in terms of community participation, council meetings, conflict of interest disclosure and integrated risk management), Knowledge Management (which was measured in terms of Annual Employee Training Sessions, Number of Employees Trained, Competency Levels), Municipality Planning (which was measured in terms of Number of jobs created, Number of Planning Meetings held, Number of SMME's /Bursary students supported and supplier development budget. Using factor analysis, Knowledge Management (which was measured in terms of Annual Employee Training Sessions, Number of Employees Trained, Competency Levels), Municipality Planning (which was

measured in terms of Number of jobs created, Number of Planning Meetings held, Number of SMME's /Bursary students supported and supplier development budget) were discarded as these were not significant in driving service delivery.

The relationship between variables were analyzed using correlation analysis. The findings indicated that all variables showed positive, moderate to weak associations that were not significant at 5% level. Multiple linear regression model indicated that service delivery is significantly predicted by financial management and corporate governance. It was also demonstrated that financial management has a significant contribution of about 82.8% while corporate governance contributes less than 20% in predicting service delivery. The elasticity factor of production in the local government environment was 8.51 indicating a high potential of managerial capital from both internal and external sources. ANOVA indicated that the model is adequately defined by FM and CG. This means that Cobb's Douglas production function is to a large extent be useful in the prediction of service delivery within local government sphere.

Annexure 1: Descriptive statistics of the variables under study

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Service Delivery								
Madibeng	5	2.4682E3	348.27789	1.55755E2	2035.7277	2900.6159	2019.08	2815.61
Ephraim	5	1.1458E2	15.02360	6.71876	95.9246	133.2331	91.83	130.22
Thembisile	5	1.8473E2	2.09496	.93689	182.1293	187.3318	182.22	187.45
Elias	5	5.6849E3	3245.74921	1.45154E3	1654.7938	9715.0537	656.87	8703.11
Moroka	5	6.7603E2	441.60969	1.97494E2	127.6989	1224.3606	250.31	1327.48
Emfuleni	5	1.5733E3	403.77754	1.80575E2	1071.9095	2074.6215	1012.88	1982.06
Total	30	1.7836E3	2316.11706	4.22863E2	918.7644	2648.4690	91.83	8703.11
FM								
Madibeng	5	7.6736E3	1092.73187	4.88685E2	6316.7457	9030.3573	6385.07	8888.39
Ephraim	5	6.9746E3	1177.85382	5.26752E2	5512.1094	8437.1068	5808.14	8799.27
Thembisile	5	5.8598E3	3471.80463	1.55264E3	1548.9761	10170.6057	1941.50	9303.34
Elias	5	4.5944E3	1588.07490	7.10209E2	2622.5659	6566.2767	2638.69	6734.01
Moroka	5	7.9261E3	2303.77880	1.03028E3	5065.6241	10786.6625	4198.06	9849.51
Emfuleni	5	1.8212E4	5463.58369	2.44339E3	11428.2084	24996.0787	9603.63	23981.11
Total	30	8.5401E3	5280.59952	9.64101E2	6568.3015	10511.9180	1941.50	23981.11
CG								
Madibeng	5	.8213	.12284	.05493	.6688	.9738	.67	.97
Ephraim	5	.7507	.41098	.18380	.2404	1.2610	.02	.95
Thembisile	5	.0000	.00000	.00000	.0000	.0000	.00	.00
Elias	5	.8994	.01795	.00803	.8771	.9217	.88	.93
Moroka	5	.6179	.15386	.06881	.4269	.8090	.40	.78
Emfuleni	5	1.4520	.81993	.36668	.4340	2.4701	.68	2.76
Total	30	.7569	.55773	.10183	.5486	.9652	.00	2.76

KM	Madibeng	5	8.5501E4	45805.38493	2.04848E4	28625.7099	142375.5047	37500.50	1.50E5
	Ephraim	5	7.0498	3.94592	1.76467	2.1503	11.9493	.24	9.84
	Thembisile	5	.6106	.17363	.07765	.3950	.8262	.38	.76
	Elias	5	.8857	.09726	.04350	.7649	1.0065	.81	1.05
	Moroka	5	.2574	.00548	.00245	.2506	.2642	.25	.26
	Emfuleni	5	.3448	.19013	.08503	.1087	.5809	.22	.68
	Total	30	1.4252E4	36601.78884	6.68254E3	584.2934	27918.9585	.22	1.50E5

CHAPTER 5 – ANALYSIS AND DISCUSSION

5.1 Introduction

The previous chapter provided results of the study which aimed at determining the influence of MC on the provision of basic services by local municipalities in South Africa. This chapter provides discussions where the findings are compared to the literature in order to identify and explain any departure points. Recommendations as well as conclusion and areas of further studies are covered in this chapter.

5.2 Discussion of findings

This subsection discusses findings in relation to the relevant literature theory. The idea is to identify any departure points and provide a concise and plausible explanation.

5.2.1 Discussion on Objective 1

Objective 1 was aimed at determining the structural configuration of managerial capital that yields enhanced service delivery outcomes in local municipalities in South Africa. The findings indicated that financial management and corporate governance are the most critical managerial capital components that drive service delivery in local municipalities. This is consistent with the theory which argued that finance management is the overriding variable that determines viability of local government (Kanyane, 2011). However, Kanyane (2011) highlighted that public finance management is necessary but not sufficient for success.

Further, the findings indicated that corporate governance is a critical managerial capital component in driving service delivery in local municipalities. This is confirmed by literature theory which argued that for solid fiscal performance, municipalities have to improve their performances in relation to corporate governance systems (Schoeman, 2011). Therefore, for municipalities to drive service delivery effectively and efficiently, focus should be given to financial management and corporate governance. In this case, corporate governance is largely driven by executive. This

requires investment in strategic leadership. Adequate financial management systems and use thereof are required to attain desired outcomes on service delivery.

5.2.2 Discussion on Objective 2

Objective 2 intended to establish the association between managerial capital and service delivery in local municipalities in South Africa. The findings showed that financial management and service delivery had a positive but weak association. Corporate Governance and service delivery demonstrated positive and restrained association as well. Not much work around this has been done particularly in local government as suggested by Guest (1997). More direct intervention mechanisms are desirable from senior management level of the municipalities to ensure that there is appropriate alignment between service delivery and Financial management.

The findings indicated that there is a positive but modest association between service delivery and Corporate Governance. This demonstrates that there is a misalignment between service delivery and Corporate Governance systems that needs oversight attention of the executive management within municipalities.

5.2.3 Discussion on Objective 3

Objective 3 was intended to ascertain the magnitude and direction of the contribution of each managerial capital component to enhance service delivery within local municipalities in South Africa. The findings indicated that financial management had the highest input share (alpha value) of 82.8% while Corporate Governance had an input share(beta) of 17.2%. Cobb Douglas production model is mostly applied in economics and production environment. This was confirmed by Sircar and Choi (2009). Therefore, no similar work in local government setup has been carried out to provide a platform of reference. The share of 17.2% of Corporate Governance indicates adequate and fair level of oversight. More than 20% share of Corporate Governance may indicate interference in the day to day running of operations. On the other, a share of 82.8% for financial management is indicative of the criticality of the financial management systems in the running of municipalities.

5.3 Conclusion

Based on the analysis and discussion above, it can be concluded that that financial management and corporate governance are the most critical managerial capital components that drive service delivery. Corporate Governance and service delivery as well as financial management and service delivery demonstrated positive but restrained association. This confirms that there is a misalignment between service delivery, financial management and Corporate Governance systems. The findings indicated that financial management had the highest input share (alpha value) of 82.8% while Corporate Governance had an input share(beta) of 17.2%. This indicates that financial management systems are critical drivers of operations in municipalities.

CHAPTER 6 - CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

Chapter Six (6) summarizes the study by drawing conclusions and recommendations based on the findings in the study.

6.2 Conclusion

The relationship between variables were analyzed using correlation analysis. The findings indicated that all variables showed positive, but restrained associations that were not significant at 5% level. Multiple linear regression model indicated that service delivery was significantly predicted by financial management and corporate governance.

Findings demonstrated that financial management has a significant contribution of about 82.8% while corporate governance contributes less than 20% in predicting service delivery. The elasticity factor of production in the local government environment was 8.51 indicating a high potential of managerial capital from both internal and external sources. ANOVA indicated that the model was adequately defined by FM and CG. This meant that Cobb's Douglas production function was to a large extent useful in the prediction of service delivery within local government sphere. Therefore, based on the above information, it can be concluded that the objectives of the study were achieved.

6.3 Recommendations

Based on the findings of the study the following recommendations could be useful for enhanced service delivery in local municipalities;

- Local municipalities in South Africa need to priorities financial management in order to achieve enhanced service delivery as it has greater influence,

- Local municipalities in South Africa need to have effective corporate governance systems such as processes, procedures, compulsory disclosure of conflict of interest, ethical considerations, public participation, accountability and transparency. All the above should not just be done for compliance purposes but should be integrated into mandatory key performance management objectives as well as key performance indicators for employees,
- This model can be adapted to any of the local municipalities and used as a tool to benchmark performance outcomes and set service delivery business implementation plan outcomes. It can also be used as a validation tool for audit outcomes
- The findings indicated weak to moderate association between, financial management, corporate governance and sustainable service delivery. Therefore, there is a need to align corporate governance systems to service delivery outcomes in order to enhance performance
- Therefore, there is a need to align financial management systems to service delivery outcomes in order to optimise performance in local municipalities

6.4 Areas for further research

The following are suggested further areas of study;

- Some of the critical areas of further research include structural configuration determination of the influence of other Managerial Capital components outside of Financial Management and Corporate Governance which include but not limited to Public Participation, Integrated Risk Management, Strategic Supplier Development, Programme Management, Project Management, Supply Chain Management and Integrated Development. Planning on sustainable service delivery;
- The impact of Executive Management Support Budgets on municipalities' service delivery needs to be explored.

- The influence of vacancies (knowledge management) can be critical in administrative and executive functions of a local municipalities and can have an influence on service delivery performance. This needs to be explored further

REFERENCES

Republic of South Africa.1996. Constitution of the Republic of South Africa. Pretoria [Online] Available from <https://www.gov.za/documents/constitution-republic-south-africa-1996-explanatory-memorandum>, accessed 02/01/2021

Statistics SA (2016) Community Survey [Online] Available from http://www.statssa.gov.za/community_new/content.asplink=interactivedata.asp, accessed 01/12/2020

Good Governance Africa Report 2019 [Online] Available from <https://www.polity.org.za/article/good-governance-africa-2019-government-performance-index-2019-04-29>, accessed 03/01/2021

Republic of South Africa.1998. Division of Revenue Bill. Pretoria: Government Printers [Online] Available from <http://www.treasury.gov.za/legislation/bills/1998>, accessed 05/12/2020

Republic of South Africa. 1998. Local Government: Municipal Structures Act 117 of 1998. Pretoria: Government Printers.

Republic of South Africa. 2000. Local Government: Municipal Systems Act 32 of 2000. Pretoria: Government Printers.

SALGA. 2006. Handbook for Municipal Councillors. Pretoria: South African Local Government Association.

Republic of South Africa. 2003. Local Government: Municipal Finance Management Act. Act 56. Government Printers: Pretoria.

Republic of South Africa (RSA). 2003a. Local Government: Municipal Finance Management Act, 56 of 2003 (MFMA). Pretoria: Government Printer.

Republic of South Africa (RSA). 2003b. Traditional Leadership and Governance Framework Act 41 of 2003. Pretoria: Government Printer

Nicholas Bloom, Aprajit Mahajan, David McKenzie, and John Roberts 2010. Why Do Firms in Developing Countries Have Low Productivity? *American Economic Review: Papers & Proceedings* 2010, 100:2, 619–623

<http://www.aeaweb.org/articles.php?doi=10.1257/aer.100.2.619>, accessed on 24/12/2020

Thornhill, C. 2006. Effective municipal government and administration as preconditions for efficient service delivery. *Journal of Public Administration. Conference proceedings September*: 317–332.

Madumo, O.S. 2012. The Promotion of Developmental Local Government to Facilitate a Developmental State. *Administratio Publica*. 20(3):40–54.

Madumo, O. S. (2015). Developmental local government challenges and progress in South Africa. *Administration Publica*, 23(2), 153-166.

Stytler, N. and De Visser, J. 2007. *Local Government Law of South Africa*. Issue 7. Durban, Johannesburg and Cape Town: LexisNexis.

Monkam, N.F. (2014), “Local municipality productive efficiency and its determinants in South Africa”, *Development Southern Africa*, Vol. 31 No. 2, pp. 275-298.

Olowu, D. 2012. Public Administration in Africa: deepening crisis despite reform efforts. In Peters, B.G. and Pierre, J. 2012. *The SAGE Handbook of Public Administration*. 2nd edition. Los Angeles: SAGE Publications.

Putu, M. 2006. The role of ward committees in enhancing public participation in Rustenburg Municipality: A critical evaluation. Available at: http://www.ewisa.co.za/ewisawaterworks/misc/MunicipalDocuments/NWDisBojanala_Platinum/LMRustenburg/ward_committee_promoting_citizen_participation.pdf. (Accessed on 23 December 2020).

Cloete, J.J.N. and Thornhill, C. 2005. South African Municipal Government and Administration: a new dispensation. Pretoria: Dotsquare Publishing

Mkhonta, P.B. 2007. Local Government in Swaziland: requirements for competent administration in Urban areas. Unpublished doctoral thesis. Pretoria: University of Pretoria.

Thornhill, C. 1995. Local Government: Government Closest to the People. Pretoria: HSRC Publishers.

Van der Waldt, G. 2015. Unpublished draft UJ Internal Handbook. Local Governance: Leading Sustainable Communities. Johannesburg: University of Johannesburg.

Cobb, C. W.; Douglas, P. H. (1928). "A Theory of Production" (PDF). *American Economic Review*. 18 (Supplement): 139–165. JSTOR 1811556. Retrieved 26 September 2016.

Smith, Adam. 1776. *An Inquiry into the Nature and Causes of the Wealth of Nations: Volume I*. New York: Cosimo Classics. Edition published November, 2007.

Solow, Robert M. 1956. "A Contribution to the Theory of Economic Growth". *Quarterly Journal of Economics*, 70(1): 65–94

Abramovitz, Moses. 1956. "Resource and output trends in the United States since 1870", *American Economic Review*, 46: 5–23.

Friedman, M. (1957). *A theory of the consumption function*. Princeton, NJ: Princeton University Press.

Becker, Gary S. 1960. "An Economic Analysis of Fertility." In *Demographic and Economic Change in Developed Countries.*, ed.

Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1-17.

Becker, G. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, 70(5), 9-49.

Becker, Gary S. 1962. "Irrational Behaviour and Economic Theory." *Journal of Political Economy*, 70: 1–13.

Mincer, Jacob. 1963. "Market prices, opportunity costs, and income effects. "In *Measurement in Economics.*, ed. C. Christ, 67–82. Stanford: Stanford University Press.

Becker, Gary S. 1965. "A Theory of the Allocation of Time." *The Economic Journal*, 75(299): 493–517.

Kiker, B. (1966). The historical roots of human capital. *The Journal of Political Economy*, 74(5), 481-499.

Mincer, J. (1974). *Schooling, experience and earnings*. New York: Columbia University Press.

Becker, G. (1975). *Human capital*, 2nd ed. Chicago: University of Chicago Press. (Chapters 3 & 4).

Smith, A. (1976). *An inquiry into the nature and causes of wealth of nations*. Chicago, IL: University of Chicago Press.

Stigler, George J., and Gary S. Becker. 1977. "De Gustibus Non-Est Desperandum." *The American Economic Review*, 67(2): 76–90.

Becker, Gary S. 1978. *The Economic Approach to Human Behaviour*. University of Chicago Press Economics Books, Chicago: University of Chicago Press.

Becker, G. A. (1981). *Treatise on the family*. Cambridge: Harvard University Press.

- Mincer, J. (1993). *Studies in human capital: Collected essays of Jacob Mincer*, Volume 1. Hants, UK: Edward Elgar Publishing Limited.
- Mincer, J. (1993). *Studies in labor supply: Collected essays of Jacob Mincer*, Volume 2. Hants, UK: Edward Elgar Publishing Limited.
- Becker, Gary S. 1993. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 3rd ed., Chicago: University of Chicago Press.
- Kiker, B., Santos, M., & de Oliveira, M. (1997). Overeducation and undereducation: Evidence for Portugal. *Economics of Education Review*, 16(2), 111-125.
- Fagerlind, A. & Saha, L.J. (1997). *Education and national developments*. New Delhi, Reed Educational and Professional Publishers Ltd.
- Smith, K. (2001). Age/earnings profiles in transition economies: The Estonian case. *Post-Communist Economies*, 13(4), 485-503.
- Smith, S. (2003). *Labour economics*, 2nd ed. New York: Routledge.
- Schoeman, N.J. (2006). Rethinking fiscal decentralization in South Africa. *Journal of Public Administration*, 41, 110-127.
- Schoar, Antoinette. 2009. "The Divide between Subsistence and Transformational Entrepreneurship", in Joshua Lerner and Scott Stern (Eds.), *NBER Innovation Policy and the Economy 2009*, forthcoming.
- Schoeman N.J. (2011). Fiscal Performance and Sustainability of Local Government- An Empirical Analysis. *Journal of Journal of Law, Economics, & Organisation*, 11, 1-31.
- Kanyane, M. (2011). Financial Viability of Rural Municipalities. *Journal of Public Administration*, 935-946.

The American Journal of Economics and Sociology Vol. 64, No. 1, Special Invited Issue: Celebrating Irving Fisher: The Legacy of a Great Economist (Jan., 2005), pp. 207-214 (8 pages)

Sweetland, Scott R. "Human Capital Theory: Foundations of a Field of Inquiry." Review of Educational Research, vol. 66, no. 3, 1996, pp. 341–359. JSTOR, www.jstor.org/stable/1170527. Accessed 14 Feb. 2021.

Solomon Fabricant, 1959. "Productivity and the Rise in Real Hourly Earnings," NBER Chapters, in: Basic Facts on Productivity Change, pages 29-37, National Bureau of Economic Research, Inc.

Blaug, Mark, 1976. "The Empirical Status of Human Capital Theory: A Slightly Jaundiced Survey," Journal of Economic Literature, American Economic Association, vol. 14(3), pages 827-855, September.

Blaug, Mark. "The Empirical Status of Human Capital Theory: A Slightly Jaundiced Survey." Journal of Economic Literature, vol. 14, no. 3, 1976, pp. 827–855. JSTOR, www.jstor.org/stable/2722630. Accessed 14 Feb. 2021.

Langelett, G. (2002). Human capital: A summary of the 20th century research. Journal of Education Finance, 28 (1), 1-23.

Becker, B. E., Huselid, M. A., Pickus, P. S., & Spratt, M. F. (1997). HR as a source of shareholder value: Research and recommendations. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 36(1), 39-47.

Becker, G. S. (2009). Human capital: A theoretical and empirical analysis, with special reference to education. University of Chicago press.

Mahroum, S. (2007). Assessing human resources for science and technology: the 3Ds framework. Science and Public Policy, 34(7), 489-499.

Langelett, George, "Human Capital: A Summary of the 20th Century Research" (2002). Economics Faculty Publications.

Syverson, Chad. 2011. "What Determines Productivity?" *Journal of Economic Literature*, 49 (2): 326-65

B Becker, B Gerhart - *Academy of management journal*, 1996

DE Guest - *International journal of human resource management*, 1997

Rastogi, P.N. 'Knowledge Management and Intellectual Capital – the New Virtuous Reality of Competitiveness'. 1 Jan. 2000: 39 – 48. Print.

Gregory G Dess, Joseph C Pickens, changing roles: Leadership in the 21st century, *Organizational Dynamics*, Volume 28, Issue 3, 2000, Pages 18-34, ISSN 00902616, (<https://www.sciencedirect.com/science/article/pii/S009026160088448>), Accessed 14th Feb. 2021

Human Resource Management Theory and Practice B Erasmus, M Van Wyk, H Schenk - Cape Town: Juta and Co. Ltd, 2003 Published in *Business Horizons*, Volume 47, Issue 1 (January–February 2004), pp 45–50.

I-CHIEH HSU, CAROL YEH-YUN LIN, JOHN J. LAWLER & SE-HWA WU (2007) Toward a Model of Organizational Human Capital Development: Preliminary Evidence from Taiwan, *Asia Pacific Business Review*, 13:2, 251-275, DOI: 10.1080/13602380701233547

<https://municipalities.co.za/overview/1060/emfuleni-local-municipality> Accessed 16March2021

<https://municipalities.co.za/overview/1188/madibeng-local-municipality> Accessed 16March2021

<https://municipalities.co.za/overview/1155/dr-js-moroka-locamunicipality> Accessed 16March2021

<https://municipalities.co.za/overview/1122/elias-motsoaledi-local-municipality>
Accessed 16March2021

<https://municipalities.co.za/overview/1159/thembisile-hani-local-municipality>
Accessed 16March2021

<https://municipalities.co.za/overview/1123/ephraim-mogale-local-municipality>
Accessed 16March2021

Richardson, A. J. (2012). Paradigms, theory and management accounting practice: A comment on Parker (forthcoming) "Qualitative management accounting research: Assessing deliverables and relevance". *Critical Perspectives on Accounting*, 23(1), 83-88.

Bouwer, R., Béguin, A., Sanders, T., & van den Bergh, H. (2015). Effect of genre on the generalizability of writing scores. *Language Testing*, 32(1), 83-100.

Bryman, A. (2012). *Social research methods*. New York: Oxford University Press.

Le, H., Schmidt, F. L., Harter, J. K., & Lauver, K. J. (2010). The problem of empirical redundancy of constructs in organizational research: An empirical investigation. *Organizational Behaviour and Human Decision Processes*, 112, 112-125.

Lloret, S., Ferreres, A., Hernandez, A., & Tomas, I. (2017). The exploratory factor analysis of items: Guided analysis based on empirical data and software. *Anales de Psicología*, 33, 417-432.