

DURBAN UNIVERSITY OF TECHNOLOGY



**LEADERSHIP CAPABILITIES FOR IMPROVING FINANCIAL
MANAGEMENT INEFFECIENCIES IN THE PUBLIC
SECTOR**

LEANETT FANYANA NTULI

JUNE 2023



**LEADERSHIP CAPABILITIES FOR IMPROVING FINANCIAL
MANAGEMENT INEFFECIENCIES IN THE PUBLIC
SECTOR**

Submitted in fulfilment of the requirements of the
degree of **Doctor of Philosophy in** Management Sciences
Specialising in
Business Administration Leadership and Complexity
in the
Faculty of Management Sciences
at the Durban University of Technology

LEANETT FANYANA NTULI

JUNE 2023

Supervisor: (signature)_

=

Date: 2023/07/28

ABSTRACT

A sound public financial management system is a precursor for the enhancement of service delivery and poverty reduction in an independent, democratic South Africa. The government has, through various Acts, closely regulated financial management in public institutions to ensure sustainable resource management for future generations. However, complex challenges related to leading and managing such institutions have continued to monopolise the realities of public financial management in towns and cities. Basic amenities such as water, electricity, and roads remain in a deplorable state, more so in disadvantaged communities. A volatile, uncertain, complex and ambiguous socio-economic landscape has exacerbated overspending and further widened the budget deficit gap. Legislators and public office bearers spend most of the time debating and aligning policy instruments towards compliance with standard procedure. They have not considered the relationship between convectional management and their leadership capabilities and its effectiveness in enhancing proper financial management and the resultant service delivery. Thus, an appreciation of the dynamic nature of how various institutions interact with policies and procedures, and inherent values, societal beliefs, as well as ethics, in effective management of finances is key, with this option enabling a robust approach in the management of public financial systems. Essentially, the research applied a multi-methodology research approach, which used a combination of System Dynamics, Soft Systems Methodology and Critical Systems Heuristics. The study revealed that if the Municipalities could recruit competent staff, the level of irresponsibility in the accounts or finance department would reduce inefficiencies and accountability will improve. This research unearths how systems thinking can develop and enhance leadership capabilities in an environment that allows for continuous learning. The outcome of the research is pertinent to public financial management practitioners, managers, and politicians, on how to enact sustainable public financial management.

Keywords: Public Financial Management, Leadership, Complexity, Soft Systems Methodology, System Dynamics, Critical Systems Heuristics

DECLARATION

I, Leanett Fanyana Ntuli, hereby declare the dissertation/thesis is my own original work, has not been submitted for a degree at any other university, and that its only prior publication will be in the form of conference papers and/or journal articles (listed in bibliography format directly underneath this statement).

Where other sources/authors have been cited, this has been acknowledged in the text and referenced at the end of this work in the bibliography.

Signature:

DEDICATION

This research is dedicated to the Creator (GOD) who has given me strength and livingness to life. This dedication goes to my late parents and my entire family for being a pillar of my strength during undertaking this project, especially my daughter (Afika) and son (Mnotfo) Ntuli, and the Ntuli and Nyathikazi families for encouragement and support. I dedicate this project to all those who have assisted me and contributed knowledge, time and skill to my study. This dedication is also reserved for my supervisor, for showing his direction and stewardship during the study process and support for its completion.

ACKNOWLEDGEMENTS

I acknowledge my strength and wisdom from the most highest. I appreciate my patience in the skills, innovation, and knowledge I gained. I would like to express my gratitude and support to my supervisor, Dr S Hardman, who guided me throughout this thesis. I would also like to thank my editor and my friends for encouragement and enthusiasm shown. My family, who supported me and provided valuable insight during my studies.

I wish to acknowledge the help provided by the research librarians and other support staff in the Durban University of Technology. This acknowledgement also goes to the public management fraternity and colleagues in the field that were a great driving force in the contribution of knowledge and academia. I would also like to show my deep appreciation to KZN COGTA officials who took part in the study, as well as my research assistant and our administrative coordinators, for helping me to finalise my project.

TABLE OF CONTENTS

ABSTRACT	iii
DECLARATION	iv
DEDICATION	v
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
ACRONYMS AND ABBREVIATIONS.....	xvii
CHAPTER 1.....	1
ORIENTATION AND BACKGROUND	1
1.1 INTRODUCTION	1
1.2 BACKGROUND OF RESEARCH AREA.....	4
1.3 SERVICE DELIVERY AND FINANCIAL MANAGEMENT IN AN INDEPENDENT RSA	9
1.4 THE DYNAMIC PROBLEM OF MANAGING FINANCES IN A VUCA ENVIRONMENT AND EFFECT ON THE SA PUBLIC SECTOR.	13
1.5 THE AIM OF THE STUDY.....	17
1.6 RESEARCH OBJECTIVES	17
1.7 RESEARCH QUESTIONS	18
1.8 RESEARCH METHODOLOGY	18
1.9 SIGNIFICANCE OF THE STUDY	20
1.10 OUTLINE OF DISSERTATION.....	22
1.11 CONCLUSION	24
CHAPTER 2.....	26
PERSPECTIVES ON LEADERSHIP AND PUBLIC SECTOR FINANCIAL MANAGEMENT.....	26
2.1 INTRODUCTION	26
2.2 PUBLIC ADMINISTRATION AND PUBLIC MANAGEMENT	27
2.3 PUBLIC FINANCIAL MANAGEMENT (PFM)	31

2.3.1 Uses of the public management system.....	34
2.3.2 Advantages of a sound PFM system	38
2.3.3 Challenges associated with PFM system	39
2.4 POLICY AND LEGISLATIVE FRAMEWORKS FROM A GLOBAL TO A LOCAL PERSPECTIVE	40
2.5 POLICY AND LEGISLATIVE FRAMEWORK FOR PFM.....	43
2.5.1 Public Financial Management Act of 29 of 1999 (PFMA)	45
2.5.2 Local Government: Municipal Finance Management Act, 2003 (Act 56 of 2003)	45
2.5.3 Local Government Transitional Act 209 of 1993	48
2.5.4 Intergovernmental Fiscal Relations Act 97 of 1997	48
2.5.5 Local Government: Municipal Systems Act 32 of 2000	49
2.5.6 Local Government: Municipal Government Structures Act 117 Of 1998	50
2.5.7 Integrated Developmental Planning.....	52
2.6 PFM AND MUNICIPAL ACT AND THEIR IMPLICATIONS ON LOCAL AUTHORITIES	53
2.7 KEY ROLE PLAYERS AND STRUCTURES IN MUNICIPAL FINANCE MANAGEMENT	57
2.7.1 External Role Players	59
2.7.2 Internal Role players.....	61
2.8 PUBLIC SERVICE DELIVERY AND FINANCIAL MANAGEMENT GOVERNANCE	64
2.9 REVIEW OF LEADERSHIP, LEADERSHIP STYLES AND THEORIES.....	66
2.10 TRANSACTIONAL AND TRANSFORMATIONAL LEADERSHIP	68
2.10.1 Transactional Leadership.....	68
2.10.2 Transformational leadership	69
2.11 ADAPTIVE LEADERSHIP.....	73
2.12 CONCLUSION	79
CHAPTER 3.....	81
SYSTEMS THINKING IN THE PUBLIC SECTOR	81
3.1 INTRODUCTION	81

3.2	AN OVERVIEW OF SYSTEMS THINKING	81
3.3	SYSTEMS APPROACHES TO PRACTICE.....	85
3.4	SYSTEMS THEORY.....	89
3.5	UNSTRUCTURED PROBLEMS.....	91
3.6	STRUCTURING THE PROBLEM USING CLD AND FEEDBACK LOOPS	93
3.7	FIVE APPROACHES OF SYSTEMS THINKING.....	95
3.7.1	Systems Dynamics (SD)	96
3.7.2	Viable Systems Model (VSM)	97
3.7.3	Strategic Options Development and Analysis (SODA)	100
3.7.4	Soft Systems Methodology (SSM)	102
3.7.5	Critical Systems Heuristics (CSH)	104
3.8	CONCLUSION	107
	SUB-CHAPTER 3(A).....	108
	SYSTEMS ARCHETYPES AND SYSTEMS DYNAMICS	108
3A.1	INTRODUCTION	108
3A.2	SYSTEMS ARCHETYPES.....	108
3A.3	RECENT DEVELOPMENTS AND FINDINGS ON THE USE OF ARCHETYPES.....	110
3A.3.1	Basics.....	114
3A.3.2	Fixes That Fail	115
3A.3.3	Shifting the Burden.....	118
3A.3.4	Limits to Success.....	120
3A.3.5	Drifting Goals	122
3A.3.6	Structure behind “Growth and Underinvestment”.....	123
3A.3.7	Success to the Successful.....	124
3A.3.8	Escalation.....	125
3A.4	“TRAGEDY OF THE COMMONS”.....	127
3A.5	POTENTIAL OF ARCHETYPE USE.....	129
3A.6	LIMITATIONS OF THE ARCHETYPE	131
3A.7	SYSTEMS DYNAMICS IN THE PUBLIC FINANCE MANAGEMENT SYSTEM.....	131

3A.7.1 The Seven Critical Thinking Skills by Barry Richmond	133
3A.7.2 Purpose and Use of CLDs for this study	135
3A.7.3 Strengths and Limitations of SD	136
3A.8 CONCLUSION	137
CHAPTER 4.....	139
RESEARCH METHODOLOGY	139
4.1 INTRODUCTION	139
4.2 RESEARCH AREA/LOCATION	140
4.3 THE NEED FOR A SYSTEMS APPROACH TO PFM	141
4.4 RESEARCH PARADIGM.....	142
4.5 ACTION RESEARCH.....	143
4.5.1 Reflection on action research and models use in a learning organization	145
4.6 RESEARCH QUESTIONS	146
4.7 RESEARCH DESIGN	148
4.8 QUALITATIVE METHODS (PRIMARY AND SECONDARY)	149
4.9 INSTRUMENT/ TOOLS	152
4.9.1 Procedures and materials used in the study.....	152
4.9.2 The use of Critical Systems Heuristics (CSH) in the study	155
4.10 SAMPLING TECHNIQUE.....	156
4.11 DATA COLLECTION	159
4.12 ANALYSIS OF THE DATA	159
4.12.1 Thematic Analysis.....	160
4.12.2 NVIVO Analysis.....	160
4.13 DISCUSSION.....	161
4.14 CONCLUSION	163
CHAPTER 5.....	164
DATA ANALYSIS.....	164
5.1 INTRODUCTION	164
5.2 PARTICIPANT DEMOGRAPHICS	164
5.3 DATA ANALYSIS PROCESS	165
5.3.1 Data cleaning process	166

5.3.2 Computer-assisted qualitative data analysis software (CAQDAS).....	166
5.3.3 Coding process	166
5.4 MANAGING PUBLIC FINANCES IN MUNICIPALITIES	167
5.4.1 Effective service delivery	168
5.4.2 Enforce transparency and accountability	169
5.4.3 Ensuring financial management compliance.....	169
5.4.4 Prevention of misuse of funds.....	169
5.5 BENEFICIARIES OF PUBLIC FINANCE AND RESOURCE MANAGEMENT	170
5.6 FINANCIAL MANAGEMENT EXPERTS	172
5.7 COMPETENCIES REQUIRED FOR PROFESSIONAL FINANCIAL MANAGEMENT	173
5.8 FACTORS CONTRIBUTING TO FINANCIAL MISMANAGEMENT 176	
5.8.1 Inappropriate budgeting plan	177
5.8.2 Lack of monitoring control system	178
5.8.3 Non-adherence to financial management laws	178
5.8.4 Poor delegation of duties.....	178
5.8.5 Recruitment of incompetent staff	179
5.9 STAKEHOLDERS INVOLVED IN PFM	179
5.10 SYSTEMS IN PLACE FOR PROPER FINANCE MANAGEMENT 182	
5.10.1 Capacity development of finance management officials.....	182
5.10.2 Compliance with performance management	183
5.10.3 Internal control planning	184
5.10.4 Evaluation of procurement plans	185
5.10.5 Monthly evaluations	185
5.11 PENALTIES FOR MISMANAGEMENT OF PUBLIC FINANCES	186
5.12 LEADERS IN DEFENCE OF PUBLIC INTEREST.....	189
5.13 RECOMMENDATIONS	191
5.14 CONCLUSION	194
CHAPTER 6.....	195

SYSTEMS ARCHETYPES AND APPLICATION OF SD MODELS.....	195
6.1 INTRODUCTION	195
6.2 STRUCTURING THE PROBLEM USING CLD	196
6.2.1 Theme 1- Beneficiaries of PF and Resource Management Causal Loop	196
6.2.2 Theme 2- Managing public finances CLD(R2)	198
6.2.3 Theme 3- Factors contributing to financial mismanagement (R3)	200
6.2.4 Theme 4- Penalties for mismanagement of PF (R4)	204
6.2.5 Theme 5- Systems in Place for Proper finance (R5)	206
6.2.6 Theme 6- Leaders in the defence of public interests (R6 + B1).....	209
6.2.7 Theme 7- Stakeholder involvement in PFM (R7, B2)	212
6.3 ARCHETYPES USED FOR THIS STUDY	216
6.4 INTEGRATED MODEL FOR FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR	217
6.5 CONCLUSION	221
CHAPTER 7.....	222
CONCLUSION AND RECOMMENDATIONS.....	222
7.1 INTRODUCTION	222
7.2 DISCUSSION.....	222
7.3 RECOMMENDATIONS	224
7.4 CONCLUSION	227
7.4.1 An investigation into the current state of leadership in financial management	228
REFERENCES	230
ANNEXURES.....	257
Annexure A: Gatekeeper's Letter	257
Annexure B: Research Ethics (FRC)	259
Annexure C: Research Instruments	260
Annexure D: Editor's Letter	262

LIST OF TABLES

Table 2.1	Traditional Public Administration and New Public Management.....	31
Table 4.1	Research questions.....	147
Table 4.2	Qualitative Research advantages and disadvantages....	150
Table 4.3	Summary of Instruments.....	154
Table 4.4	Probability vs Non-probability Sampling	158
Table 5.1	Participants' Demographic Profile.....	165
Table 5.2	Coding process example	166
Table 6.1	Main Themes.....	195
Table 6.2	Sub-themes- PF and Resource Management	196
Table 6.3	Sub-themes- Managing public finance	197
Table 6.4	Sub-themes- Contribution to financial mismanagement.	200
Table 6.5	Sub-themes- Penalties for mismanagement of PF	204
Table 6.6	Sub- themes- Systems for proper finance	206
Table 6.7	Sub-themes- Leaders of public interests	209
Table 6.8	Sub-themes- Stakeholders involvement	212
Table 6.9	Sub-themes- Tragedy of the commons.....	214

LIST OF FIGURES

Figure 1.1	Rich Picture	3
Figure 1.2	Service Delivery Mechanisms.....	10
Figure 1.3	Overall Audit Outcomes.....	11
Figure 2.1	The PFM cycle and the key role players.....	36
Figure 2.2	Structure and functions of the South African Government.....	44
Figure 2.3	Rich Picture of Key Role Players and Structure in Municipal Finance.....	58
Figure 2.4	Theoretical model	73
Figure 2.5	Adaptive Leadership Framework	74
Figure 2.6	Adaptive Process.....	76
Figure 3.1	Three aspects of using a systems approach: situation, user and system	83
Figure 3.2	Systems Thinking using systems paradigm	86
Figure 3.3	A system and its environment.....	90
Figure 3.4	Causal pyramid.....	92
Figure 3.5	Example of CLD	94
Figure 3.6	Systems Dynamics	97
Figure 3.7	Viable System Model (VSM).....	99
Figure 3.8	Strategic Options Development and Analysis (SODA) with Cognitive Mapping	101
Figure 3.9	Application of Soft Systems Methodology in Systems thinking	103
Figure 3.10	Critical system heuristics	105
Figure 3A.1	The Structure Behind “Fixes That Fail”	116
Figure 3A.2	Nested Loops	118
Figure 3A.3	Shifting the Burden	119
Figure 3A.4	Systemic Structure Behind “Limits to Success”	120
Figure 3A.5	The Systemic Structure Behind “Drifting Goals”	122
Figure 3A.6	Structure Behind “Growth and Underinvestment”	123

Figure 3A.7	Structure Behind “Success to the Successful”	125
Figure 3A.8	Structure Behind “Escalation”	126
Figure 3A.9	“Tragedy of the Commons” CLD.....	128
Figure 3A.10	Operational Thinking	132
Figure 3A.11	Basic Structure of Stock and Flow Diagram	135
Figure 4.1	Service delivery protests by province, 2019	140
Figure 4.2	Action Research	144
Figure 4.3	Reflection model using FMA.....	146
Figure 4.4	Sampling techniques	157
Figure 5.1	Coding process.....	167
Figure 5.2	Tree diagram of managing public finances in municipalities	167
Figure 5.3	Managing public finances	168
Figure 5.4	Tree diagram (beneficiaries of public finance and resource management)	171
Figure 5.5	Beneficiaries of public finance and resource management.....	171
Figure 5.6	Tree diagram (Financial management experts)	172
Figure 5.7	Financial management experts.....	173
Figure 5.8	Tree diagram (Competencies required for professional financial management)	174
Figure 5.9	Competencies required for professional financial management.....	174
Figure 5.10	Tree diagram (Factors contributing to financial mismanagement).....	177
Figure 5.11	Factors contributing to financial mismanagement.....	177
Figure 5.12	Tree diagram (Stakeholders involved in PFM).....	180
Figure 5.13	Stakeholders involved in PFM	180
Figure 5.14	Tree diagram (Systems in place for proper finance management)	182
Figure 5.15	Tree diagram (Penalties for mismanagement of public finances)	187

Figure 5.16	Penalties for mismanagement of public finances.....	187
Figure 5.17	Tree diagram (Leaders in defence of public interest)	189
Figure 5.18	Leaders in defence of public interest	190
Figure 5.19	Tree diagram (Recommendations	192
Figure 6.1	CLD Beneficiaries of PF and Resource Management	196
Figure 6.2	Managing public finances CLD	198
Figure 6.3	CLD Factors contributing to financial mismanagement ..	201
Figure 6.4	CLD Penalties for mismanagement of PF.....	205
Figure 6.5	CLD Systems in Place for Proper finance.....	207
Figure 6.6	CLD Leaders in the defence of public interests	209
Figure 6.7	CLD Stakeholders involvement in PFM	212
Figure 6.8	Tragedy of the Commons	215
Figure 6.9	Integrated financial management model.....	219

ACRONYMS AND ABBREVIATIONS

AG	Auditor General
ANC	African National Congress
CAQDAS	Computer-assisted qualitative data analysis software
CFO	Chief Financial Officer
CLD	Causal Loop Diagram
CSH	Critical Systems Heuristics
COGTA	Cooperative Governance and Traditional Affairs
EFF	Economic Freedom Fighters
DA	Democratic Alliance
DUT	Durban University of Technology
4IR	Fourth Industrial Revolution
KZN	KwaZulu-Natal
HRM	Human Resource Management
IDP	Integrated Development Plan
JOURNEY	Jointly Understanding Reflecting and Negotiating Strategy
MEC	Member of the Executive Council
MFMA	Municipal Finance Management Act
MM	Municipal Manager
MSA	Municipal Structures Act
NDP	National Development Plan
NPM	New Public Management
PFM	Public Financial management
PF	Public Finance
PFMA	Public Finance Management Act
PPP	Public private partnerships
RSA	Republic of South Africa
SA	South Africa

SADC	South African Development Community
SALGA	South African Local Government Association
SAICA	South African Institute of Chartered Accountants
SAR	Systemic Action Research
SARB	South African Reserve Bank
SD	Systems Dynamics
SODA	Strategic Options Development and Analysis
SSM	Soft Systems Methodology
UN	United Nations
VSM	Viable Systems Model
VUCA	Volatile, Uncertain, Complex and Ambiguous

CHAPTER 1

ORIENTATION AND BACKGROUND

1.1 INTRODUCTION

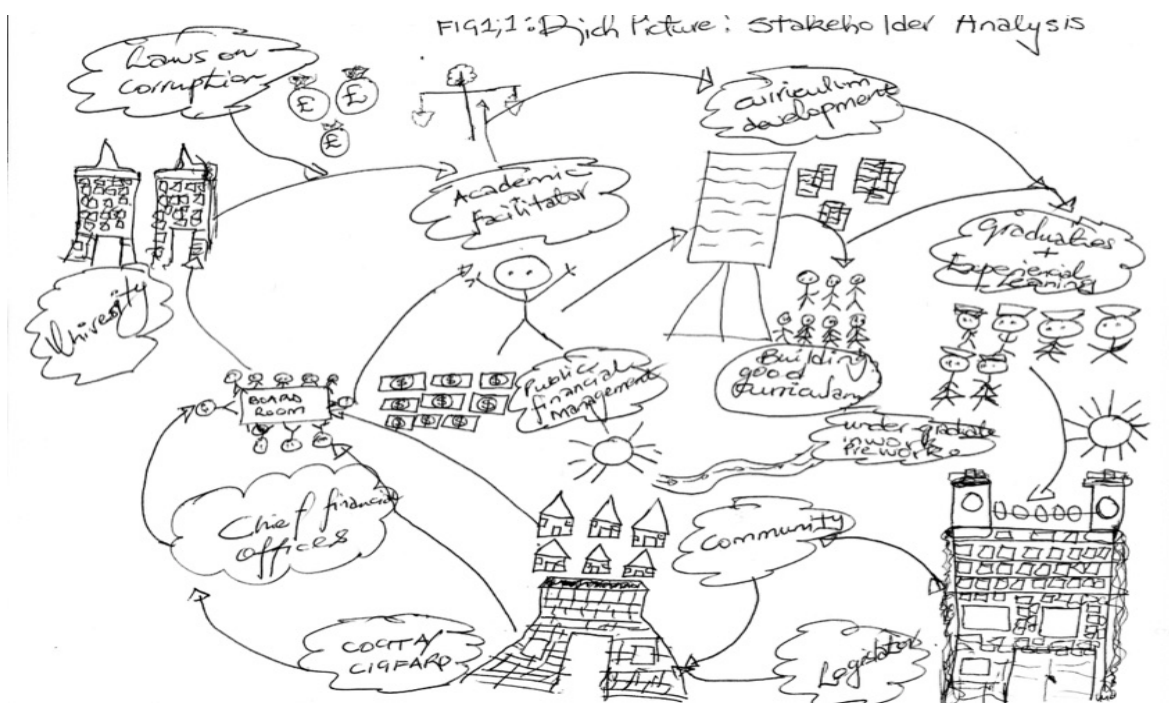
This chapter introduces the study focus, its contextual relevance and the research approach followed to inform my enquiry. It also outlines what the study intends to cover in the remaining six chapters. Briefly stated, my focus is on financial management in the public sector and the important role of leadership in continuous improvement. The relevance is that this is a problem area experienced by the researcher, as well as my ex-students. The research approach employed is one of using systems thinking as a theoretical framework.

The focus of this study was influenced by my work as an academic in the higher education sector. This study was prompted to focus on how leaders could improve their abilities to tackle challenges related to public financial management (PFM). The essence is on tapping into leadership rather than management, while at the same time, being cognisant of the dynamic nature of financial management in public institutions. To obtain a snapshot of the complex nature of work related to PFM, this research used a rich picture (Fig 1.1) to depict those involved in the PFM value chain. The picture also portrays the current situation in the PFM landscape, with an emphasis on the components and their dynamic relationships.

Against this background, the study aim was to explore how PFM can be enhanced through leadership capabilities. The study further sought to understand how different styles of leadership can be canvassed to improve service delivery, with those that dovetail with the current fourth industrial revolution (4IR) emphasised, as they can enable management of resources in a Volatile, Uncertain, Complex and Ambiguous (VUCA) environment. Leadership approaches that enable management of dynamic environments

such as adaptive leadership were thus considered as an alternative to the current leadership approaches in public financial institutions. This was proposed by various researchers and practitioners, in order to improve the PFM to ensure sustainable resource management for future generations.

In this instance, PFM and its outcomes (service delivery) are a result of the multifaceted interaction between graduates from academic institutions, who have been guided by tutors or academic facilitators and the larger socio-economic environment. When they enter the public space, they interact with the community, are governed by legislation and make decisions in boardrooms that shape the nature of the public financial purse. In all these situations, both management and leadership qualities have a quantum effect on final service delivery. All these stakeholders thus have a direct or indirect influence on both quality of leadership and management decisions. Thus far, efforts to manage government departments, municipalities, or institutions that offer public services, have faced enormous challenges since public institutions were set up in the past century. Below is the 'rich picture' outlining a complex situation.



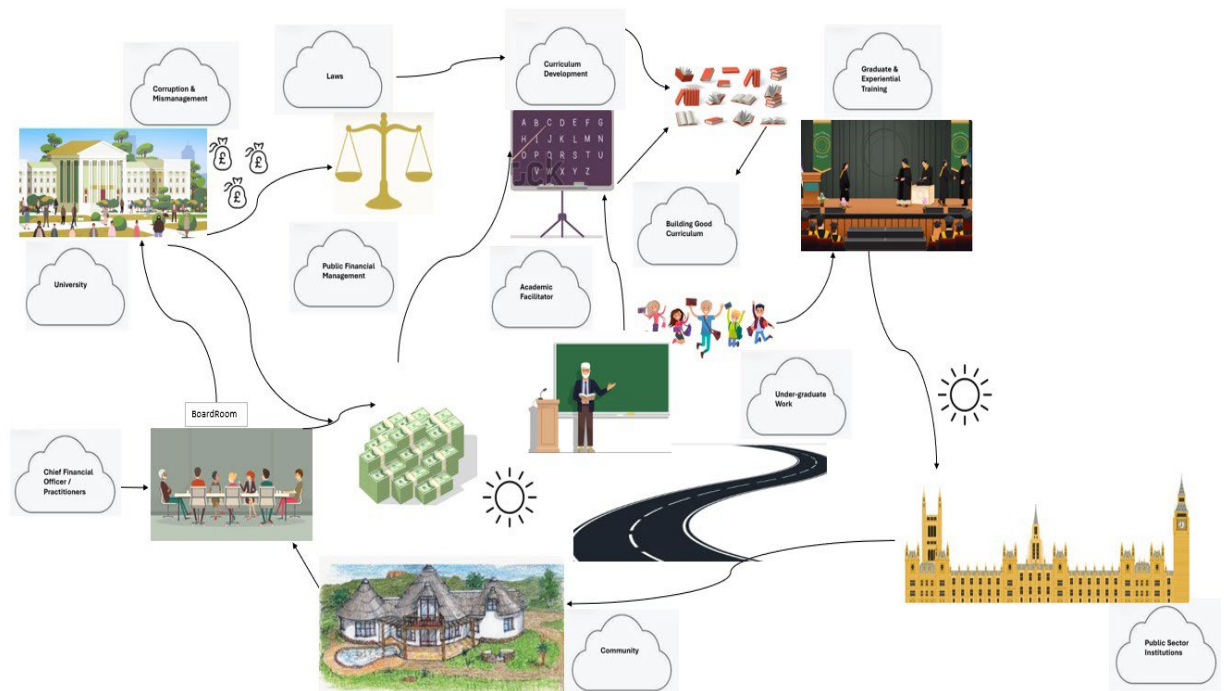


Figure 1.1: Rich Picture

Source: Developed by author

The complexity of the PFM system and the various parties involved is depicted in great detail (Figure 1.1), illustrating how PFM is currently implemented and how its many parts are interconnected in real-time. Cooperative Governance and Traditional Affairs (COGTA) DGs and Directors, as well as other stakeholders, were interviewed to gain perspective on the current state of affairs.

The researcher included students, graduates, municipal workers, and public institution representatives, as well as the lawmaker in charge of public sector financial management rules and standards; all shown in the image, representing the various parties involved in the value chain. Also included in this detailed image (Figure 1.1), are descriptions of anti-corruption and anti-mismanagement rules and regulations, along with evidence of the researcher's

position as an academic facilitator contributing to university-level curriculum development.

Additionally, the arrows show the relationships between different parties, emphasising the interdependence and interconnection between communities and educational institutions. The researcher drew the detailed drawing by hand and then recreated it digitally, with participants spending 45 minutes discussing the rich picture online.

Against this background, the intricate diagram (Figure 1.1) accurately depicts the multifaceted PFM system and its many players. It highlights the researcher's commitment to curriculum development and the fight against corruption and financial mismanagement, while effectively conveying the current condition of PFM and the relationships between its components.

1.2 BACKGROUND OF RESEARCH AREA

Globally, the challenge of running cities, towns and municipalities has spilled into the 21st century, particularly in developing countries. As populations grow and with the effects of the 4IR now being seen and felt, there has been need for public officials to also be coordinated with the rapidly changing global socio-economic environment to improve service delivery (Siddle and Koelble 2019). There has, historically, been a trend of failed leadership in the administration of financial management in most countries across the globe. In Europe, the system within many European countries is increasingly enabling public service delivery by private companies through public private partnerships (PPP) and dialogue. As a result, the local governance system has been able to separate from political influence, to become purely a public service delivery agent (Ndreu 2016).

The South African Development Community (SADC) is a territory, economy, and community on the African continent, founded in 1992 and consists of 16 member states. The desire to foster the integration of Southern African

markets led to the formation of the SADC, with both economic and political forces having influenced this to date (SADC 2020). The launch of the SADC industrialisation plan and roadmap in 2017 symbolised the region's efforts to promote industrial development and strengthen regional ties (SADC 2017). Despite this, the SADC remains plagued by high unemployment and poverty, a failure to structurally reform its economy, environmental concerns, and high inflation, as well as rising debt levels (SADC 2019).

This, along with inadequate infrastructure, continues to undermine the region's socio-economic growth and constrains integration efforts, in addition to deterring investors, both local and foreign, stifling investment into provision of services such as health, roads, water and access to finance. Critical service provision for housing, hospitals, and basic amenities is thus affected. Thus far, no collective policy framework exists to address the massive backlog of service delivery at regional level. However, individual member states have developed national policies that prioritise inclusionary housing, although implementation remains low (SADC 2020).

The lack of regional policies has, nonetheless, affected unity of purpose in PFM in the region. For instance, in an article titled 'How far have Public Financial Management Reforms come in Africa?', Andrew (2011) lamented Zambia's lack of PFM accountability and not yielding to civil society pressure for transparency. The research highlights the need to improve mechanisms of accountability, specifically mentioning "the degree of public scrutiny and pressure on the government to meet its reform commitments should be improved and civil society can play a role in exercising sufficient pressure for good public financial management" (Andrew 2011: 14). Other SADC countries such as Zimbabwe have also experienced these challenges, due to a lack of a national vision on PFM, which speaks to the different political players that govern municipalities (Mumvuma 2016).

In South Africa (SA), many municipalities are still grappling with issues that stem from leadership deficiencies and service delivery. The Auditor General (AG) (2018-2019) indicates the political administrative interface has caused discord in management due to factionalism found in political parties. Politicians and executives are at odds with one another, and amongst themselves. Furthermore, there is no efficient financial management framework, as well as a growing derailment of provinces' and national government's oversight responsibilities. As a result, several towns remain unable to implement PFM at acceptable levels. Only a select few can reach the highest management standards, as evidenced by the AG's year-end reports. Communities frequently fail to comply with the legislative requirements of the local government system, and service delivery is often dangerous, if not non-existent in some municipalities (Siddle and Koelble 2019).

The inability of the intergovernmental relations system to efficiently coordinate planning across the three spheres of government has also extended to financial management. As a result, the majority municipalities has inadequate financial management capabilities, control, and accountability mechanisms, hence a rise in fraud, corruption, and abuse of municipal assets and funds (COGTA 2014). The regulation of debt collection, the culture of non-payment, and the rise in debt levels are factors that have had detrimental effects on the financial viability of municipalities. Furthermore, there is a backlog in service delivery that is gradually rising; to the point where the government will be unable to fulfil the post-2030 National Development Plan (NDP), because of lack of funding and leadership capabilities to eliminate the infrastructure backlog.

In terms of human resource management (HRM), minimal oversight by the executive at ministerial level, and challenges related to current executive recruitment processes have also been cited as affecting financial management of municipalities. Politicians have, furthermore, been found to interfere with

recruitment and appointment procedures, stated as another reason for non-compliance with workplace responsibilities (COGTA 2014).

The 'Back-to-Basics' campaign was introduced in 2014, and is the latest programme initiated by National Government. Local government reforms, in general, along with administrative reforms, were typically proposed steps to increase the performance, effectiveness, professionalism, and service ethos of city council administrations in these policy manifestos. Organizational transformation, human resource capacity engagement, information and management systems, and financial resources were all needed to facilitate such reforms. However, the evolution of local government usually coincides with wider political, legal, and administrative changes in government. Hence, the implementation of the proposed reforms had to follow wider government reforms (COGTA 2014).

Clearing infrastructure backlogs, as well as ensuring access to affordable basic services, are some of the key problems found by the turnaround plan. The back-to-basics campaign was accompanied by a holistic evaluation of municipalities in all nine provinces, with citizens scrutinising functional areas such as political stability. Currently, local government financial management is guided by section 216 of the Constitution of RSA 1996, which requires national legislation to prescribe measures that ensure transparency and expenditure control in each sphere of government; with the National Treasury required to enforce compliance with these measures. In SA, the legal basis of local government is envisaged from Chapter 7 of the Constitution, further supported by Chapter 3, which deal with the principles of cooperative governance, and Chapter 13, which deals with local government finances. These policies currently guide local government administration to achieve equitable, effective, and efficient service delivery and to provide leadership in financial management (RSA Constitution 1996).

Against this background, it can be pointed out these constitutional provisions are also reflected in the Public Finance Management Act (PFMA), Act No. 29 of 1999, and supported by the Municipal Finance Management Act (MFMA), Act No. 56 of 2003. The PFMA aims to secure sound and sustainable management of the financial affairs of municipalities and other institutions in local government, and to establish norms and standards for financial management in local government areas. In addition, COGTA has two responsibilities, namely to develop national policy and legislation and to monitor the implementation of such policy. The National Treasury (2011: 28) highlights "municipalities do not have a good control on their financial management systems, which shows the deficiencies in leadership and service delivery on the part of municipalities" (COGTA 2009b: 13).

Financial management in municipalities is based on three approaches applied by the government, namely the limited resources approach, the policy implementation approach, and the policy compliance and accountability approach. These approaches are supported by guidelines in the PFMA. The challenge is to ensure these policies are properly implemented (Pauw *et al.* 2009). The National Treasury has adopted these approaches and practices to improve service delivery and excel in financial management. Applying best practices and benchmarking financial management practices is an important requirement for practitioners (Pauw *et al.* 2009).

Some approaches used in managing financial resources in practice, in both management and leadership, are described by Pauw *et al.* (2009). These approaches include limited resources, policy implementation, and the accountability approach. SA has developed a financial management policy in the PFMA (Act No. 1 of 1999, amended by Act No. 29 of 1999), comparable to that of more developed countries. The challenge has been to ensure these policies are properly implemented. When examining the implementation process of these policies, it involves a thorough analysis of these policies that can eventually help in their interpretation and the development of an action

plan that will drive the implementation process. This means other managers are available to ensure financial management is not just about the authorised expenditure of funds or the proper collection of revenue and management of debt, but also ensuring the implementation of laws and council policies (Pauw *et al.* 2009).

1.3 SERVICE DELIVERY AND FINANCIAL MANAGEMENT IN AN INDEPENDENT RSA

Service delivery in RSA municipalities is guided by the Municipal Systems Act, Act 32 of 2000, which stipulates the governance mandate to be fulfilled by municipalities and the bounds in which the operations of municipalities should be carried out. It is under the second objective that, among other matters, stipulates municipalities should be financially sustainable. To achieve this and other mandates, the Municipal systems act provided for internal and external mechanisms to enhance service delivery, to ensure a sound financial management system is obtained (Figure 1.2).

This framework endorsed the role of local governments in development and advocated a new method for addressing the core causes of municipal financial challenges. “It gives cities the authority to exercise their constitutional responsibilities to balance anti-poverty and equity programs with the goals of growth, job creation, and competitiveness” (Fourie and Opperman 2018).

A major problem for public leaders is to make long-term judgments and strategies in the face of various, sometimes competing, goals (Denis, Hanouna, and Sarin 2006: 455). As local government must be developmental in nature, municipal budgets must be tailored to fulfil development demands voiced by local populations. This will necessitate not only alignment of budgets with municipalities' integrated development plans (IDPs), but also the control of the entire financial management process (Pauw *et al.* 2009: 253). Hence,

many political party manifestos in SA have pledged their intention to see improvement of PFM in the public sector.

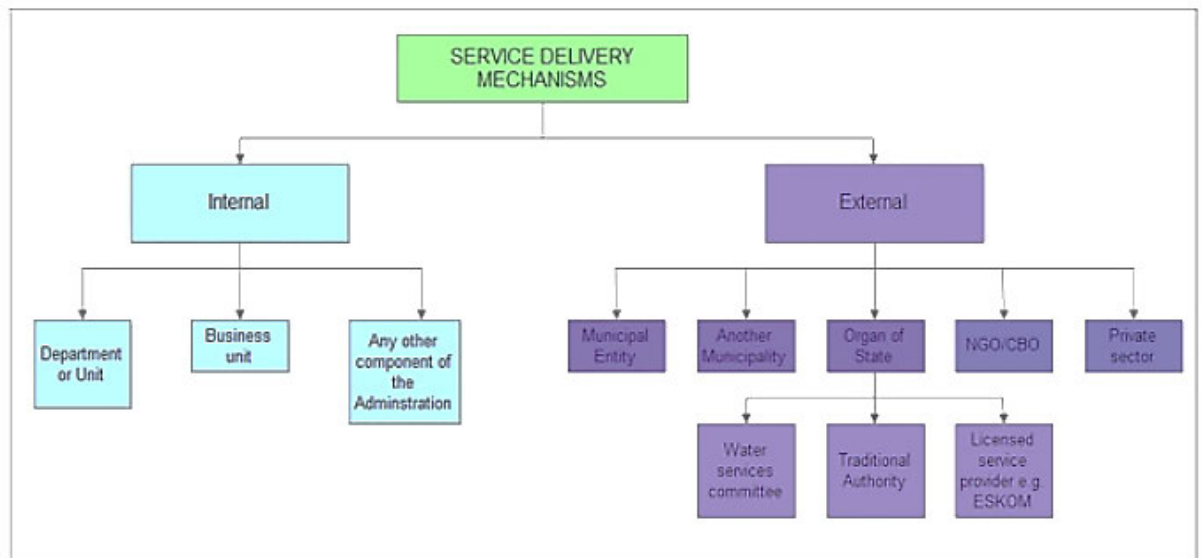


Figure 1.2: Service Delivery Mechanisms

Source: South African Development Community (SALGA 2010)

After implementation of these acts, the AG's report in 2009 noted the following challenges in service delivery, stated as associated with skills provision, planning and budgeting, as well as cash flow management, diminished by high expenditure, as reported by the South African Local Government Association (SALGA) (2010). There were also challenges related to feedback of information between the non-financial and financial aspects. Specifically, the report highlighted the following aspects as lacking or needing attention:

- "Inability to manage cash flow significantly.
- Inadequate skills on credit and debt management, including basic financial accounting and filing or record-keeping, in most instances;
- Duplication of payments, in some instances, and amounts not accounted for (lack of financial accountability);
- Lack of systems to manage audit queries and recommendations, both internal and external auditing; and

- Inadequate systems with regard to corporate governance specifically, in relation to the conflict of interest and accountability frameworks, and effective integrated risk management systems within municipalities” (SALGA 2010)

The AG reports from 2010-2019 also highlighted these anomalies and reported continuous financial mis-appropriation (Figure 1.3).

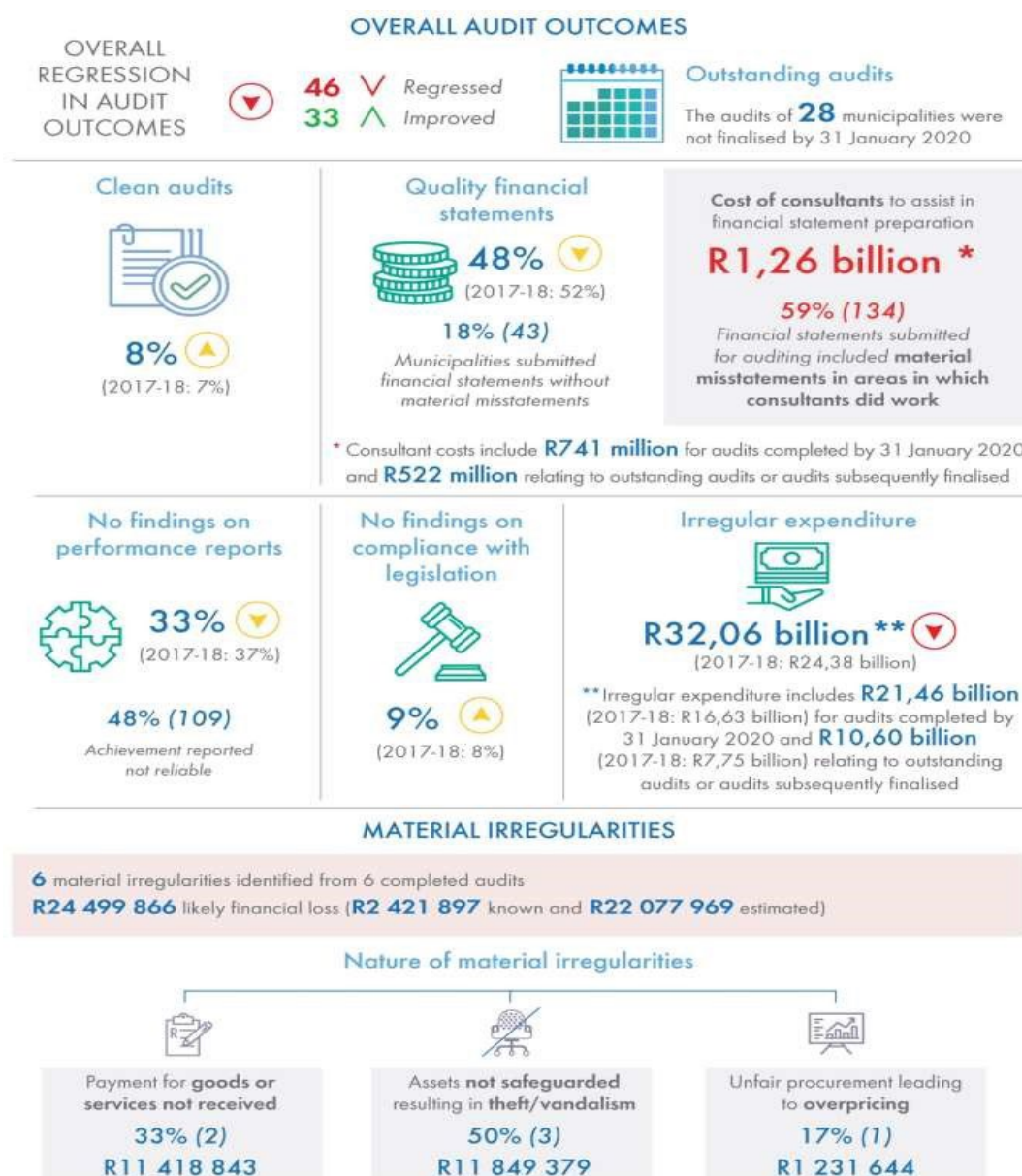


Figure 1.3: Overall Audit Outcomes

Source: AG Reports (2018-2019)

Recent reports by the AG (2018 to 2019) highlight the extent of the challenges associated with financial management. Weaknesses in local government financial management have not been effectively addressed for almost a decade, as performance continued at below par, along with the quality of submitted financial statements (AG 2018). Makwetu (2019) argues that, "credible financial statements and performance reports are critical to enable accountability and transparency in government", noting most municipalities continue to fall short in these areas. The report further elaborates that, "Not only did the unqualified opinions on the financial statements decrease from 47% to only 43%, but the quality of the financial statements provided to the auditor-general for auditing showed no improvement from the previous year" (AG 2018).

Further to this, the AG adds the performance reports of 67 percent of the municipalities submitted had significant deficiencies and were not credible enough for the council or the public. Thus, municipal councils in SA spent R1, 26 billion on consultants for financial reporting services, however, only seven percent of that was due to vacancies in their finance departments. Only 14 percent of the municipalities that used consultants saw an improvement in their audit results, while 22 percent regressed (AG 2018).

According to Makwetu (2019), preventative measures can do much to correct gaps and deficiencies depicted in the AG's report. Internal controls are a municipality's preventative systems, policies, and procedures that ensure the integrity of financial data. A municipality's internal controls are the preventative systems, policies, and procedures in place.

"It is more effective to prevent poor-quality financial statements and performance reports, noncompliance, and material irregularities than to deal with the consequences – money and time are lost, costly investigations must be conducted, and officials are subjected to the

discomfort and anxiety associated with these processes, which can take years"
(AG Report 2018: 26).

1.4 THE DYNAMIC PROBLEM OF MANAGING FINANCES IN A VUCA ENVIRONMENT AND EFFECT ON THE SA PUBLIC SECTOR

The forever-growing trend of the service delivery lack continues to be a challenge for most municipalities in SA. For instance, service delivery protests persist day-by-day in most municipalities. This provides a grimy picture on the state of financial management in municipalities. Nevertheless, efforts have been made to address the issue of leadership and to strengthen PFM in these institutions. Tkachenko (2020) argued that, at present, governments of different countries implementing PFM changes confront a variety of obstacles. For individuals accountable for the outcome of this process, the complexity and diversity of the process of managing public finances is a problem. Curristine, Lonti and Joumard (2007) claim "governments in a variety of countries are under pressure to improve public sector performance while also containing expenditure growth, all while dealing with factors such as aging populations and citizens' growing demands for government to be held more accountable for what it achieves with taxpayers' money".

The problem associated with managing finances in municipalities was unpacked using the nested structure of four levels of intervention by Abson *et al.* (2016), derived from Meadows (1999), who determined places to intervene in a system. There are four levels of intervention in society to any problem, namely: at parameter and feedback levels (considered shallow leverage points) and at design and intent levels (considered fundamental levels of intervention).

The 12 leverage points originally identified by Meadows were synthesised by Abson *et al.* (2016) into four broad system characteristics wherein sustainability efforts could focus on parameters, feedback, design, and intent.

The mechanical qualities (taxes, standards) and physical structure are referred to as system parameters (buffers, flows). The connections between elements of the system that control amplifying (positive) or dampening (negative) feedback loops are referred to as system feedbacks. Abson *et al.* (2016) suggest “the structure of information flows, rules, and power characteristics make up a system's design”. Therefore, system intent deals with the goal of the system, as well as the paradigm or mind-set on which it is based (Abson *et al.* 2016).

Each of Meadows' original leverage points is captured by one of the four system characteristics, ranked from shallow to deep. Using the concept of leverage points as a conceptual tool and epistemological lens, it is possible to examine the various problems of sustainability, the actions derived from them, and the outcomes that result. The scale depicts a hierarchy of intervention sites for influencing systemic change (Abson *et al.* 2016).

In modern times, PFM has been complicated by phenomena such as globalisation, the global economic crisis, corruption, and new technologies, as well as other factors, thus exacerbating the need for effective PFM. In addition, PFM is affected by a variety of factors and various risks, subsequently enhancing service delivery. Its dynamic nature requires attenuation of the risk and complexity factors associated with effective financial management. Public finance (PF) managers are obliged to change approaches to financial management in the public sector to suit the ever-evolving nature of PFM. New PFM approaches such as limited resources, the policy implementation approach, and policy compliance approach, have digressed from traditional approaches to match the multifaceted nature of 21st century PFM administration (Tkachenko 2020).

The ongoing problems suggest financial mismanagement has continued to occur, despite existence of legislation and management codes of conduct to curb this rot in municipalities, which is evident in the lack of service delivery.

This is also echoed by the AG reports (2014/2015, 2017/2018), which depict KZN as highly featured in issues regarding irregular expenditure. The province incurred R2bn in irregular spending and service delivery backlog has increased over the years. In addition, increased unauthorised expenditure and leadership capabilities have been questionable. On the one hand, departmental practitioners tend to spend more time in complying with all legislative frameworks, yet, on the other hand, there is an outcry by local communities with regard to service provision. Thus, municipalities fail to maintain the delicate balance between policy alignment and the provision of services (AG 2018).

As a result of this lack of proper institutional design, there has been significant consequences for service delivery. The challenge with current institutions, supposed to deliver services from National government to local councils, is their design, which used reductionist approaches, hence, their ability to deal with complexity associated with the ever-evolving 4IR is problematic. This has affected PFM in the primary areas, which are public revenue, public expenditure, public debt, and public financial administration and budgeting. National Treasury points out the many consequences of poor financial health that include, staff not receiving payments, basic services being cut, contractors and suppliers not being paid, and high maintenance and repairs to critical infrastructure such as roads and sewerage systems, as well as poor future revenues. Furthermore, poor financial management processes and systems expose the municipality to corruption, which increases the cost of municipal borrowing (National Treasury 2007).

The PFMA stipulates specific demands brought about by Constitutional changes and legislative interventions such as the PFMA in SA. This legislation introduced supply chain management (SCM), currently implemented by all government departments. However, with leadership capabilities key to policy implementation, they also ensure policies are implemented across all sectors with efficacy, effectiveness and efficiency in the process, as dictated by the

PFMA. A lack of urgency by leadership in honouring commitments and implementing action plans has been identified as root causes of the current purchasing situation, with inequalities between finances mobilised, budgeted and accounted for, along with the output, which is service delivery (AG 2017/2018).

The global and local VUCA environment of purchasing in the 21st century has seen the emergence of complex and modernised systems that pose challenges to the development of high-performance organisations within the public sector. Furthermore, management systems have not evolved at the same pace as the 4IR. When the political office is elected to power, it is done on the bedrock of a vision and objectives they want to attain. At present, the Municipal Systems Act requires the crafting of IDPs. These 5-year plans are geared to achieve the Constitutional objectives, in tandem with other state institutions. Ultimately, these institutions should contribute to progressively realising the fundamental rights linked to the environment, property, housing, and health, as well as water, social services and education (SALGA 2010).

The challenge is that the timeframe allowed for the policies to run does not allow for holistic feedback mechanisms between national and provincial governments. Poor feedback between provincial government, local municipalities, management, and politicians, along with the electorate, also exists. In addition, policies and management are often evaluated based on economic development and growth indicators, yet, basic services have not trickled down to something tangible, such as proper collection of refuse, or the adequate provision of water, in order that the ordinary citizen can credit the current leadership in positions of governance. There is also no evaluation in terms of perceptions, norms, values, and ethics, as well as world views of society, and how they have been affected by current governance approaches, thus affecting facets associated with Sustainable Development Goals (SDGs) 3, 10 and 16.

SDGs were set up in 2015 and deal with the wellbeing, inequalities and peace within societies. Though these soft factors play a primary role in policy formulation, service delivery and the general socio-economic wellbeing of citizens, they are often ignored, hence, the need for an interface that holds leaders in public office accountable holistically, making it crucial for robust feedback mechanisms to exist between all spheres of government and ordinary citizens.

PFM should, moreover, be a vehicle that ensures all SDGs are attained; this means its design should not only comprise accountability in terms of revenues collected and correct disbursement of funds. The paradigm from which the PFM system arises should be broad and measured in terms of a holistic value chain, which strongly encompasses hard (policy, institutions, technology) and soft (values, ethics, governance structures) factors that determine PFM. This will enable management of the underlying determining structures that have burgeoning characteristics. Nevertheless, this has not been the case to date, placing emphasis on a few aspects, such as the need to balance books that have to do with financial management, while ignoring these fundamental structures that determine PFM.

1.5 THE AIM OF THE STUDY

The study aim was to develop a systems approach to enhance leadership capabilities in PFM, with the study objectives in tandem with this.

1.6 RESEARCH OBJECTIVES

The study objectives are as follows:

- To identify opportunities and challenges associated with current PFM and leadership approaches.
- To explore nascent approaches in ensuring effective leadership capabilities in undertaking PFM in its dynamic nature for effective service delivery.

- To create new knowledge by building a learning system and developing models to effectively cope with PFM inefficiencies.

1.7 RESEARCH QUESTIONS

The subsequent questions of this research sought to direct the process of fulfilling the objectives:

- Ultimately, what are the participants' perspectives and opinions that give attention to complex modernised PFM structures?
- What are the systemic weaknesses of inefficiencies for PFM affecting service provision?
- How best can the current challenges affecting leadership in PFM and service delivery be approached?
- In view of the contexts, limitations and debated dialogues, to what degree does the restructuring of the state sector motivate employees to contribute to quality service provision in the historical sense of the public sector, as well as the history of institution-building in SA?

1.8 RESEARCH METHODOLOGY

The study used a multi-methodological approach in an action research framework. Checkland's Soft System Methodology (SSM) was the main approach guiding the research, with aspects of Systems Dynamics (SD) also aiding in information extrapolation and analysis. A multi-methodological research strategy involves more than one method of collecting data and or more than one method of analysing the data. Such methods can be based on both qualitative and quantitative techniques (Mills, Durepos and Wiebe 2010). Hesse-Biber (2010) refers to multi-methodology as "combining two or more qualitative methods in a single research study or by using two or more quantitative methods in a single research study". This allows the researcher to gather a rich source of data, which is advocated for when attending to complex and dynamic challenges.

The research instrument was mainly designed using Ulrich's Critical Systems Heuristics (CSH). The purpose of critical heuristics can be described as a critical approach to democratic planning, with the aim to develop a critical consciousness in people regarding the conditioning nature of any kind of 'improvement', and thereby 'subvert' people's technocratic notion of planning. "CSH offers ordinary people the minimal critical competence (self-reflective and argumentative skills) needed to translate such critical consciousness into meaningful and effective participation in planning processes" (Ulrich 1993: 14).

The use of systems archetypes, SSM, SD, and CSH as methodological approaches, was part of the multiple-method employed to ascertain the validity and scope of this study. As outlined, aligning the research paradigm to "paradigmatic commensurability" substantiates systems thinking as choice for the main approach to understand leadership capabilities and PFM. "Systems thinking still lacks a logical coherent framework which can properly ground and inform multi-paradigmatic methodical approaches to practice" (Bowers *et al.* 2014: 4).

To gather information for the study, semi structured interviews were conducted with Chief Directors after they had been shown the rich picture drawn by the researcher. The essence of the interviews was to gain an understanding on what motivated the continuous use of current PFM systems in place and the power dynamics that drive PFM and service delivery, as postulated by Ulrich (2002). The interviews were held with 10 Chief Directors of the COGTA in the province of KZN. Access was gained through the Research and Management Unit and the Head of Department.

A second round of interviews was then conducted with the Directors of departments who also play a critical role in decisions made in the running of financial management, including members of COGTA finance committees. Information generated from both rounds of interviews was analysed using thematic analysis and NVIVO. These themes were used for SD analysis and

then to design systems archetypes to determine underlying structures that are the bedrock of the current PFM process. These archetypes were used to inform the interventions needed and to design the framework to enhance continuous improvement of leadership capabilities.

1.9 SIGNIFICANCE OF THE STUDY

The study is relevant to a plethora of areas. First, at political level, political parties entrusted with the running of municipalities have an oversight role in these municipalities, which can assist in ensuring accountability and proper PFM, with positive effects on their aspirations of continuously governing. For example, the African National Congress (ANC) manifesto, launched on 12 January 2019, hinges on transforming the economy to serve all people, through interventions that promote a developmental growth path to create not only more but also suitable jobs applicable to all levels of society. “These interventions will be accompanied by the development of an appropriate macro-economic framework to support the transformation of the economy, ensuring accountability to all people” (ANC Manifesto 2019).

Meanwhile, the Democratic Alliance (DA) manifesto emphasises the party will ensure:

“[...] national debt does not cripple the economy by introducing fiscal spending rules to prevent the debt-to-GDP ratio continuing to spiral out of control. The party aims to implement a debt ceiling at a maximum of 60 percent of GDP. On institutional independence, the DA promises to ensure the South African Reserve Bank (SARB) remains independent, able to deliver on its constitutional mandate of protecting the value of the Rand by ensuring it remains independent and free of political control. The DA aspires to create a new plan to realise economic justice for all South Africans, by redressing and accessing opportunities” (DA manifesto 2019)

In hindsight, the aspiration of the Economic Freedom Fighters (EFF) in the economy is to “strive” for a South African economic outlook, where the state owns strategic sectors of the economy and ownership and control of the non-state-owned sector reflects the demographics of the country. The EFF promises to:

“[...] de-commodify basic needs such as education and health, with services driven by the needs of the people and not by profit maximisation. The party aspires to drive for regional and continental economic integration, in a manner that will qualitatively and quantitatively expand economic activities and intra-trade in SA, the SADC and the African continent” (EFF manifesto 2019).

Hence, this research will be useful in informing different political players on how to holistically deal with PFM, thus enhancing governing aspirations.

At policy level, government policy has the objective of ensuring future generations will also have access to basic services such as water, electricity, sewerage systems, roads and refuse collection, as determined by the PFMA; accurate and appropriate PFM is antecedent to this. The policy implementation approach is concerned with implementation of policies and this research will aid in PFM policy implementation. Policy implementation and functioning is, to a greater extent, determined by underlying structures and this research will uncover these structures with the intention of informing policies. This will ensure policy implementation, in terms of financial management, receives the necessary attention (Pauw *et al.* 2009).

SA has created and developed financial management policies in the PFMA (Act No1 of 1999 as amended by Act No. 29 of 1999), with leadership capabilities in implementation of these policies now imperative to all stakeholders. Proper financial management by leadership is a crucial element of municipal management, as it enables local government to plan, mobilise,

and use financial resources in an efficient and effective manner, as well as fulfil its obligation to be accountable to its citizens. This is the basics of the municipal financial management process. The fundamental components of public sector financial management are: budgeting, accounting, reporting, and auditing, and their application in local government are given attention where leadership capabilities have been enhanced (Municipal Finance Handbook 2014: 93). This study also targets enhancing the capabilities of current and future leaders.

At a level of practice, the research is relevant to current and future Chief Directors and managers in the financial environment. This is enhanced through ensuring the 4IR regimen in SA is comparable with those of the more developed countries across the globe. Hence, this will further enhance PFM through holistic pathways to improve PFM and leadership capabilities. At academic level, this study will develop ways to engage from an action research perspective to improve performance. The research will be of essence, as it enhances future development and creates platforms of proper engagement, in addition to the opportunity to improve curriculum development and the sharing of knowledge in this field of Public Administration.

1.10 OUTLINE OF DISSERTATION

Chapter 1 (Orientation and Background of the Study)

Chapter 1 presented the introduction and background of the study, provided an explanation and motivation of the study, dealt with the problem statement, research questions, research objectives, and significance of the study, as well as the research limitations, while it also offered a brief explanation on the research methods employed in this study.

Chapter 2 (Literature Review on Leadership Theories, Styles and PFM)

In Chapter 2, different styles of leadership applicable to the public sector are explored and comparisons drawn. Emphasis has been on leadership issues in international communities, as well as at national, provincial and local

government levels, with significances and interests. Issues pertaining to inefficiencies and leadership approaches will be discussed. A review on public management, administration, financial management systems, and the PFM legislative framework, as well as the role of adaptive leadership in PFM will, furthermore, receive special focus. This chapter will also present and explore various case studies on leadership failure at municipal level.

Chapter 3 (Systems Thinking and Approaches)

Chapter 3 features discussions around the significance of public administration and systems thinking. Systems approaches included are SSM, Viable Systems Model (VSM), SD, and CSH that are briefly demonstrated and discussed. The study will explore case studies on leadership failure at different levels, with attention paid to the municipal level and service delivery.

Chapter 3(A) (Systems Archetypes and the use of Archetypes)

Chapter 3(A) presents as a sub-chapter of this study and will focus on an overview of the Systems Archetypes and building of models using archetypes in SD. Critical thinking skills and the use of casual loops are evaluated. The chapter explores models and the different system archetypes, with the use of each archetype discussed in detail. The advantages and disadvantages of these archetypes are also presented and explained.

Chapter 4 (Research Methodology and Design)

Details and the description of the methodology of the research the study employed will be given in this chapter, along with the research tools used to analyse study data. The location of the study and data collection method for the use of semi-structured interviews are also expressed. The chapter deals with research design, research methods and various data collection techniques, while SD, SSM and CSH present a reviewed analysis of action research.

Chapter 5 (Presentation and Analysis of Results)

The results and data generated from participants with the use of CSH are set out in this chapter, along with the tools used to create a thematic analysis and NVIVO version. Analysis of the results are presented and analysed using NVIVO as a tool. Further to this, an examination of the state of leadership in financial management in the public sector using a systems approach is presented.

Chapter 6 (Discussion and Application of Systems Dynamic Models)

Chapter 6 will provide discussions on the learning interventions and use of systems approaches adapted for the study. SD and the archetypes created are discussed in an attempt to address leadership issues and inefficiencies of PFM affecting the province. Demonstration of SD models created using VENSIM are also illustrated.

Chapter 7 (Study Conclusion and Recommendations)

This final chapter summarises the viewpoints and engagement emanating from the previous chapters, focusing on the research findings of this study. Concluding remarks and recommendations for further research are also given attention.

1.11 CONCLUSION

The outcome of the study will assist municipalities in KZN PFM units to make more informed decisions on financial management inefficiencies and management efficiency. In addition, it may assist to produce models that reduce inefficiencies in financial management and increase their capacity development in service execution. The results of this study will help in that it provides relevant data, views and viewpoints, with which to develop models for inefficiencies in financial management and leadership. Furthermore, the findings will contribute to existing PFM models, applicable or used by the provincial administration in KZN municipalities, while considering the perpetual

learning system that emerged in this research. The adoption of system thinking and the application of SSM, SD, and CSH enlightened this research approach, especially in the field of public administration, where there is not much or little written concerning the combination of these approaches. Improving inefficiencies and structural vulnerabilities in PFM can help create capacity for local leaders to reverse the service failure in the province. This work concentrated on strategic solutions by promoting adaptive leadership as a leadership style that will allow officials to learn and adapt to the ever-growing governmental and industry technologies facing the Public sector globally.

CHAPTER 2

PERSPECTIVES ON LEADERSHIP AND PUBLIC SECTOR FINANCIAL MANAGEMENT

2.1 INTRODUCTION

The introduction and historical context for the study were discussed in the previous chapter. This chapter unearths the diverse leadership styles that impact the public sector, particularly at municipal level in the province of KZN. The focus is on patterns of international and national government settings and the chapter provides an overview of the explanations for such developments. The research attempts to unpack the challenges that contribute to lack of leadership skills around service delivery and the problems that stem from lack of acceptable leadership skill implementation in the delivery of services.

The legislative structure of the Act on PFM (PFMA), the Act on municipal finance administration and other matters pertinent to PFM are also examined. In addition, the theoretical background on policy issues in SA that deal with leadership are questioned. Although there has been increased research into several styles of leadership theories over the past years there has, nonetheless, been less research on how local initiatives in adaptive leadership and systems thinking impact public sector management. This has led to the need for a review of structural deficiencies in PFM that affect service delivery.

Leadership work has been widely recognised worldwide for many decades, and many academics, leadership researchers and practitioners laid a foundation much earlier in this field. It is not the research intention to repeat the vast literature on leadership but to emphasise that which this study considers appropriate. Greater prominence was afforded to recent leadership theories, such as transformational leadership, as they dovetail with current and future leadership trends in the increasingly complex 21st century.

This chapter thus tries to unbundle how leadership can act as a facilitator for public sector management and work on identifying any discourse gaps. It was thus critical to review how leadership has been applied in public sector management from the global arena to local areas, and establish how adaptive leadership can aid proper management of public institutions, particularly municipalities. In a sense, adaptive leadership has been considered a potential game-changer in terms of public sector management, as it considers dynamic situation management. Furthermore, adaptive leadership approaches those challenges currently faced in the public sector more holistically.

2.2 PUBLIC ADMINISTRATION AND PUBLIC MANAGEMENT

A considerable body of work on public administration and management, spanning both worldwide and regional countries, has been written by a number of academics throughout the years. "Public administration is in some situations used synonymously with public policy and public service," according to Lungu (1997: 1). The author's analysis of public administration, as opposed to public policy, may be because, in practice, "public administration is rooted in the formulation of public policy and its management, structuring, and policy interventions through restructuring of the public service to provide efficient and effective services to the public." Consequently, Lungu may be analysing public administration rather than public policy. In addition, public administration is responsible for ensuring the structures of the government are "fully structured and in conformity with the legal framework to achieve and maintain good governance" (Siswana 2007: 66).

Public administration is defined by many more scholars in the field. For example, Woodrow Wilson is one of the earliest scholars who defined public administration as:

"The field of administration is a field of business... The object of administrative studies is to rescue executive methods from the confusion and costliness of empirical experiment and set them upon

foundations laid deep in stable principle... Public administration is the detailed and systematic execution of public law. Every particular application of general law is an act of administration" (Gildenhuis 1993: 12).

As argued by Shafritz, Hyde and Parks (2004: 18), "Politics is the expression of the will of the government and administration is the implementation of that will." Administration, according to Gladden (1966: 12), is a process that consists of three stages: the stage of choice, the stage of administration, and the stage of fulfilment. In addition, Public Administration is described as the "organised non-political executive state function" by Pauw *et al.* (2008: 28), whereas Gildenhuis (1997: 14) defines Public Administration as the "detailed and systematic execution of public law".

Jordaan (2017: 36) asserts the aim of public administration is to satisfy society's needs through considering the conditions for,

"[...] fairness, people's democratic rights, equity, the need for transparency and participation. Aligned with all these implications and in order to manage scarce and limited resources in the most economic, efficient and effective way to accomplish the goals set by public policy, any public organisation needs to determine the functions necessary for successful delivery of goods and services aligned with the needs of society".

Concerns regarding the rate at which services are being provided continue to be the primary factor driving sentiment. In this regard, Bourgon (2007: 19) highlights that,

"[...] public administration principles should be based on systematic and scientific methods of financial performance management, capacitated, empowered and motivated personnel and scientific

structural arrangements for logical divisions within work roles and the management of responsibilities”.

This is echoed by Jordaan (2017: 35), who states, “This approach emphasises values such as representativeness, political and administrative responsiveness, and accountability”.

Public administration, then is,

“[...] an activity as old as human civilization, and like the sciences, it could be considered a process rather than a product. Public administration is a means of expressing the values and preferences of citizens, communities, and society as a whole. Governments, as the principal instruments of democracy in society, exercise state power on behalf of the people in the area that constitutes the state. The government makes policy to meet the needs of the communities it must serve, and then organises and empowers its administration to put that policy into practise. This requires that well-organised and empowered administrations successfully undertake thought processes and actions to deliver services that meet the needs of society. Public administration has evolved over time, with a growing need for a value-based approach to public service, based on public administration practises, to deliver efficient and effective services that meet the changing needs of society. Administration is not an end in itself, but still a means to an end. The relationship between administrations, government, and the environment to meet the needs of society is obvious” (Jordaan 2017: 36).

Rhodes (2003: 48) contends public management is a continuous action that can only be made feasible by public administration, whereas Hughes (2003: 45) describes public management as "simply continuing the practise of public administration." These two authors are in agreement that one of the most

important functions is public management. As a result, public management can be interpreted as the execution of a wide variety of tasks. These functions can be categorised as fulfilment (management or operational functions), auxiliary functions, instrumental functions, and line functions, respectively.

Public management is thus, as Du Toit (2002: 5) explained,

“[...] very important as a component of public administration. In this regard, public management is the ability to transform resources into services and products for use by society. This transformation takes place when the managerial, auxiliary, instrumental and line functions are performed. However, public management does not encompass the entire field of public administration, but refers to a tiny part of the very broad subject of public administration”.

Bryson, Crosby and Bloomberg (2014) maintain the approaches to public administration, whether managerial, political, or legal, are pertinent to the management of scarce resources to realise public policy goals. The authors state these approaches have influenced the understanding of public administration as well as its practices. According to the authors, these methods have had an impact not only on the conceptualization of public administration but also on its actual procedure. They find a relationship between resource management for maximum efficiency and the constructs of investment returns and value-for-money. Therefore, Bryson *et al.* (2014: 16). state the “principles and practices of public administration should aim to maximize economy, efficiency, and effectiveness by adopting responsive practices similar to those of the private sector”.

A comparison by Jansen (2008: 15) demonstrates the distinctions between the old style of Public Administration and the newer style of New Public Management (NPM) (Table 2.1), allowing an understanding of both paradigms, as this serves the credibility of this research.

Table 2.1: Traditional Public Administration and New Public Management

Feature	Traditional Public Administration	New Public Management
1. Organizational structure	Centralized, including uniform control	Divisionalized with units organized by products
2. Relationships between and within units	Unspecified and open-ended agreements	Contract based
3. Styles and practices	Governmental ethics and styles	Private ethics and styles
4. Budgeting focus	Stable, focused on budgets	Efficiency oriented, aimed at cutting of resources
5. Management profile	Inactive; policy skills and knowledge of rules important	Visible, hands-on management
6. Performance orientation	Qualitative, implicate standards	Explicit, related to clearly defined targets
7. Focus of control	Focused on rules and procedures	Focused on output and results

According to Polidano (1999: 3), a reference to the reform of the public sector by academics and practitioners is meant to be understood as the NPM paradigm. The author of this article argued the NPM reforms are a response to widespread pressures such as "deregulation of line management; conversion of civil service departments into free-standing agencies or enterprises; performance-based accountability, particularly through contracts; and competitive mechanisms such as contracting-out and internal markets" (Polidano 1999: 3). Furthermore, Jordaan (2017) asserts the NPM has the goals of promoting a performance-driven culture, innovating the process by which state-owned companies function to raise their efficiency and effectiveness, and providing services that are customer-centric, mission-driven, and of a better quality.

2.3 PUBLIC FINANCIAL MANAGEMENT (PFM)

The phrase "public financial management" (PFM) refers to "the combination of laws, rules, procedures, and processes used by sovereign nations (and sub-national governments), to mobilise revenue, allot public funds, conduct public

expenditure, account for monies, and audit results" (Jordaan 2017: 26). In the public sector, the goal of financial is to control limited financial resources in such a way as to ensure sustainability and efficiency in the delivery of outputs required to achieve desired outcomes (effectiveness), which will satisfy the demands of the community. In other words, the goal of financial management is to serve the needs of the community (appropriateness). Therefore, satisfying the requirements of the community is both the purpose and the objective of financial management, and satisfying the requirements of the community is the objective of financial management (Jordaan 2017: 27).

Public sector financial management encompasses a variety of functions that go beyond financial management and is essentially implemented as part of a six-stage cycle that begins with the formulation of policies and concludes with an external review and audit. This cycle begins with the formulation of policies and concludes with an external review and audit (Figure 2.1). Lawson focuses attention on the myriad different actors involved in what he refers to as the "PFM cycle", in order to guarantee it results in both open and efficient operations, while also preserving accountability (Lawson 2015). Evaluation and analysis of management performance are made more difficult in the public sector, because profits are not a metric used there.

This contrasts with the situation in for-profit businesses. As explained by Jordaan (2017: 18), the success of management in the public sector can be measured in terms of "economic functionality, efficiency, effectiveness, and appropriateness" and is directly related to the performance of PFM. This is due to these means of measurement referring to the appropriateness of management. Jordaan (2017) also makes the point that the performance of PFM is closely connected to these elements.

Planning and control of capital expenditures, management of working capital, and involvement with appropriate treasury, financing, and performance choices are all components of PFM. In addition to this, it is in charge of the

oversight of the financial and management accounting functions that support the organisation, with these functions primarily concerned with gathering, processing, and delivery of financial information, as well as supporting financial information systems planning, operation, and control. These functions are also responsible to ensure appropriate controls are in place. "Financial management encompasses everything from day-to-day cash management to the design of long-term financial goals, policies, and strategies to support the department's strategic and operational plans," (Jordaan 2017: 19).

This echoes findings by Pauw (2002: 6), who stated PFM also includes "mobilising resources, prioritising programmes, the budget process, managing resources efficiently, and implementing controls. People's increasing demands place more demands on financial resources". The author adds citizens are, simultaneously, emphasising the increasing importance of PFM, in using "value for money as measured by efficiency, effectiveness, and efficacy" (Pauw 2002: 6).

PFM duties include "budgeting, finance, expenditure management, accountability, financial reporting, and auditing," according to Visser and Erasmus (2013). These functions might involve some elements of applied economics, but they are distinct from those carried out by the private sector in that the vast majority of their funding comes from the public sector and, most of the time, not with the intention of maximising profits. As stated by Flynn (2007), there is neither a clear nor a permanent boundary between the public and private sectors, particularly for state corporations with the added objective of also maximising profits. Blidisel *et al.* (2010) provided support for the concept by arguing the majority organisations operating in the public sector are adopting management techniques typically used in the private sector. The authors attribute this to the increased influence based on perceptions that generalise the idea of "structural and managerial homology between all the organizations". This is because, although they are different, each with their own different purpose, they are similar and share common characteristics.

Tilley (2014) argued more importance should be afforded to a conscientious financial management discipline in the public sector than the private sector, as this financial leadership assists in the delivery of good value-for-money outcomes that are “people-focused and sustainable”. Therefore, as a major component of NPM, “the functions of PFM can be reviewed under budgeting, financing, expenditure management, accountability, financial reporting and auditing” (Nyamita, Dorasamy, and Garbharran 2015).

With regard to managing different internal parts of the new public administration, PFM is by far the most important component (Ademolekun 1999: 68; Hughes 2003: 164; Greener 2013: 182). In addition, the ability to raise and spend money (known as “funding and expenditure management”) is something that differentiates government institutions from other areas of society. Every action the government undertakes needs money in order to function. PFM under the NPM, followed three primary themes after the financial management of many governments was restructured. These themes were “the promotion of results-based management, the adoption of accrual accounting, and the application of market-based processes” (Christensen and Laegreid 2013: 106).

2.3.1 Uses of the public management system

Lawson (2015) recommends in order to evaluate a PFM system; its objectives must first be stated. These objectives should also include the end results the system's performance may be measured against. It is common knowledge that a PFM system ought to accomplish three goals; however, we will add a fourth objective to the list here, namely to encourage accountability and transparency. As a result of its strong relationship to the idea of inclusive institutions, this is becoming regarded as a distinct purpose that is, nevertheless, intertwined with another.

Lawson (2015) outlines four objectives that ought to be accomplished with the use of a PFM system.

- The first objective is to preserve aggregate fiscal discipline, which should guarantee overall levels of tax collection and public spending are proportionate to fiscal deficit targets and do not result in unsustainable levels of public borrowing.
- Second, a PFM system ought to guarantee public resources are assigned to agreed-upon strategic goals, or, to put it another way, allocative efficiency is reached.
- Third, the PFM system ought to ensure operational efficiency is attained, which can be seen as the realisation of the greatest possible return on investment in the provision of services.
- Finally, the PFM system ought to adhere to proper procedures and be identifiable.

Based on these objectives, Musgrave (1959: 4) stated that, “financing in public administration focuses on prioritising and using scarce resources, ensuring effective management of public funds and assets, and achieving value for money in achieving the government's objectives, in other words, delivering the best possible services”. The author advocated transparency and compliance with all policies. In addition, the function of financing within a government is highlighted as comprising various activities, which the author outlines as: drawing up fiscal policy, formulating and execution of budgets, financial operations management, and accounting, as well as evaluation and audit.

It is essential for a government to have adequate financial resources at its disposal before it can successfully carry out its duties toward the citizens it is charged with protecting and providing for. Taxes, charges, levies, and fees, in addition to loans and fines, are some of the ways the people's money is returned to the government after it has been spent by the government using

money that rightfully belongs to the public (Botes *et al.* 1998: 314). The legitimate owner of public funds is the group of citizens that make up a state, generally known as "the people." The government does not have the authority to claim ownership of these funds. People are concerned that their taxes are not being spent in an appropriate manner by governments, and they want to know how and where their taxes are being spent. People want to know how and where their taxes are being spent. In addition, they are interested in learning how the money from those taxes is being spent. As a result, governments are being compelled to become performance and outcomes oriented, in addition to accountable for their actions (Pauw *et al.* 2009: 6).



Figure 2.1: The PFM cycle and the key actors

Source: Lawson (2015)

Lawson (2015) contends an effective PFM system ought to be an essential part of the institutional architecture of a strong state. Countries with PFM systems that are robust, transparent, and accountable, are more likely to deliver services in an efficient and equitable manner, as well as regulate markets in an efficient and equitable way. This is due to efficient provision of public services being associated with both the alleviation of poverty and the growth of the economy.

A capable PFM system is, therefore, an essential condition for the vast majority development outcomes; however, this alone, is not adequate. Both the ability to collect taxes in a way that is both just and effective and the ability to spend the money acquired in a way that is responsible, are necessary components of statehood. These are the defining traits of "inclusive" governmental institutions, which are important for the cultivation of trust, the encouragement of innovative energies, and the promotion of societal expansion (Acemoglu and Robinson 2012).

In addition, Lawson (2015) shows increasing the efficiency of a PFM system can result in the generation of both widespread and long-lasting benefits. This could, in turn, assist to shore up more broad transformations in society towards inclusive institutions and, therefore, towards states that are stronger, centred on reduced poverty, as well as better equality with regard to gender and balanced growth. When actors from the outside, such as donors, want to see improvements made to PFM systems, it is important for institutions and staff to have an understanding of these systems. This is because these actors will frequently work with or through these institutions to provide budgetary support or climate finance. Aid is typically provided by donors in the form of project-financed initiatives, which are then staffed and sustained through the use of funding from the national budget. In a nutshell, PFM is important, and the average person has to have at least some fundamental familiarity with it, in addition to the requirement they periodically review their understanding of it (Lawson 2015).

Ajam (2016: 17) then stresses PFM implementation approaches in provincial governments need to urgently be revised, in order that "better value-for-money from public expenditure in the provincial sphere can be achieved in the interests of social equity and future economic growth". According to the AG (2018-2019), the issue remains concerning the ability to execute these tasks. There is no doubt the previous and current democratic dispensation still lacks

this, as many municipalities continue to experience difficulty in managing their finances, particularly in municipal positions where allegations of failure to retain roles are evident in the many instances of mismanagement, weak governance and failure to provide services to people promptly. In certain situations, the mayors are reportedly too involved in the functions of city/municipal manager (MM) and chief financial officer (CFO) in municipalities.

2.3.2 Advantages of a sound PFM system

The implementation of reliable PFM systems is essential to the enhancement of service delivery, the alleviation of poverty, and the achievement of development objectives (Jordaan 2017). Instead of imposing external solutions, as characterised by Jordaan, the new guidance for growing capacity is to build on competencies that are already in place.

“A solid public financial management system enables the government to make the best use of all available resources, including international development aid, and addresses the goal to use public resources efficiently and effectively to meet the needs of the community in an equitable manner. Public financial management is more than just spending more it also necessitates sufficient financial management capabilities in order to maximize the impact of public resources on society's quality of life. This encompasses both budgeting and income generation. As a result, raising revenue is critical for development and state-building” (Jordaan 2017: 137)

The maintenance of strict adherence to the financial plan is the fundamental purpose of the PFM system. The application of fiscal discipline should ensure the tax collection and public expenditure levels are compatible with the goals set for the budget deficit (Lawson 2013). The PFM system's primary responsibility is to ensure the government does not incur any new debt. Second, the PFM system should protect efficient public resource allocation, specifically conformance of authorised state resources with strategic state

programmes. This should be the primary focus of the system. Third, the PFM system should be able to provide operational efficiency, specifically the achievement of a price-quality ratio in the provision of service. Last, but not least, a PFM system that is open and transparent should require the presence, control, and accountability of those responsible for the use of public financial resources.

PFM reforms are, on the one hand, being implemented by several governments throughout the world in order to attain their PFM goals. On the other hand, to grasp the core of these reforms, it was necessary to examine the historical context of the changes in the realm of PF (Tkachenko 2020: 12).

2.3.3 Challenges associated with PFM system

Prior to the PFMA of 1999, many flaws in the financial management system could be found, including an antiquated accounting system that could not supply data for activities such as quick and accurate budgeting and budgetary control, along with financial planning and performance monitoring (John 2016). As a result of insufficient reliable and up-to-date financial information, as well as the lack of information on assets and liability, PFM is seen as obsolete and overcomplicated. Further to this, the outdated computer equipment and systems of treasury instructions, in addition to the lack of quantifiably objective descriptions and criteria for performance also add to the problem. John (2016), moreover, points to the widespread shortages at junior and middle management levels of personnel who are appropriately qualified and trained financially, largely attributed to uncompetitive compensation and qualified and trained financial staff being enticed away.

In an article by Tsheletsane and Fourie (2014), it was concluded many factors impact public financial responsibility and accountability; for example, the high rate of renewal of accounting officers, as well as staff turnover among parliamentary committee members, which negatively affects good governance. To achieve criteria such as accountability, responsibility and

transparency, governance must be analysed in the context of public finance. The authors emphasise structures supporting governance and their functioning are important, with these institutions having to support governance in the context of the PFMA. When these structures and institutions are not suitably managed, the responsibility of PF could be poorly accounted for. Tsheletsane and Fourie (2014) maintain the importance that structures understand their operations do not take place in isolation but need each other in the interests of good governance.

In the Republic of South Africa (RSA), local administration has been confronted with a tough array of challenges. This includes the tasks assigned to local government being thoroughly re-defined, as required by the Constitution; the transference to local government of a variety of supplementary functions and powers; interactions between councillors and officials that are new and frequently challenging; and new ideas for the delivery of services. In addition, the authors include a lack of capacity, along with other institutional shortcomings, such as nepotism and corruption, unrealistic senior government officials and general public expectations; as well as a framework based on idealism, rather than the insights brought by decentralisation processes and the realities that accompany them (Siddle and Koelble 2019).

2.4 POLICY AND LEGISLATIVE FRAMEWORKS FROM A GLOBAL TO A LOCAL PERSPECTIVE

The global financial crisis has had a severe influence on the funding available to the government, which has led to budgets being stretched to their limits in order to meet the ever-increasing requirements for public service. Pessoa and Pimenta (2016) stated in the book titled “The efficiency of public financial management in Latin American countries” that PFM has been enhanced during the last few years, despite many challenges that remain to be overcome, with regard to improving organisational structure, legal framework, methods, and strategies, as well as information systems. One of the most

important factors is insufficient indicators to measure PFM effectiveness as a way to improve performance (Pessoa and Pimenta 2016).

Certain changes in PFM have been more fundamental than others, as stated by Van der Walle and Hammerschmid (2011: 192). These transformations have substantially impacted the nature of the public sector in the majority European countries, brought about by these shifts. It would appear the new innovations in financial management implemented in Europe's public sector over the course of the past decade are "stuck down in a swamp of critical adjustments and assessments" (Gualmini 2008: 75). The writer of this post maintains the focus of the reforms agenda on efficiency has been perceived as a threat to public officials' ethics and accountability.

Aizenman and Shah (2013: 1) shared that the "most notable development in the global economy over the last 35 years and currently, is the rise of China and India as the world economic giants". For India, this has been due to massive policy changes within the public sector and a total reform of PFM practices (Dongre 2012: 278). Reddy, Nangia and Agrawal (2013: 18) argued, because of this,

"[...] the economy has drastically changed from highly regulated institutional setting to the one that is more market-oriented due to financial management reforms. This has, however, been different in Africa, where reforms in public sector finance management have occurred at a snail's pace".

According to Owusu (2006: 471), the significance of a public sector that operates efficiently in the process of Africa's development cannot be disputed. The author further suggests "the challenge is finding ways to create effective governmental units capable of facilitating national development." Since the 1980s, a number of African nations have participated in a variety of public sector financial management reform programmes, with the assistance of the

World Bank and other international institutions in favour of reform, such as the International Monetary Fund (IMF) (Antwi, Analoui, and Nana-Agyekum 2008). Nonetheless, these difficulties in the administration of public sector finances continue (Owusu 2012).

United Nations Habitat (UN-Habitat 2004) reported the basic problem with Africa's municipal finance can be described as the disparity between municipal expenditure needs and financial resources, combined with inadequate financial systems. This financial gap is reported as widening with increased urban population growth and infrastructure and urban services demand. The fact the growth in municipal revenues does not match the growth in urban economic activity is technically referred to as lack of (municipal) revenue elasticity. The experience is highlighted by UN-Habitat (2004) as an indicator in many countries that local authority taxing powers are not far-reaching enough, with insufficient revenue gains from existing sources to cover expenditures. In Africa, numerous cities are largely reliant on property taxes and other service charges for revenue, while more lucrative sources such as income, sales, and business tax, are monopolised by central governments. Many cities thus rely on mostly inadequate and frequently irregular central government allocations (UN-Habitat 2004).

For instance, Peterson (2011) found the necessity for swift outcomes in Ethiopia's public sector financial management practises were needed, in order to maintain pace with the increasing speed of public sector decentralisation. However, this has not been the case thus far. Antwi *et al.* (2008: 14) noted further that what seems to be a reality, in terms of financial management in the context of the Ghanaian experience, is the change in terms of public official career employment. This was mentioned in reference to Antwi *et al.* (2008: 14) noting the aforementioned reality. In addition, Seymour (2011: 45) is of the opinion that for public sector reforms to benefit Nigeria, the country faces "the considerable challenge of putting in place a legal framework to avoid another

disaster in an already broken service delivery system." This is because people in Nigeria do not have access to fundamental services.

The findings of a report published by UN-Habitat (2004) are thus matched, wherein financial issues were identified as the primary challenge facing most African towns. These issues arise from unethical practises and the improper management of resources set aside for development. Numerous projects are either never initiated at all or those that are started, are halted due to corrupt officials syphoning off funding, either operating on their own or in conjunction with individuals in the private sector. This is the case for several different projects. Another illustration of this problem is the inept management of projects by council administrative employees, who lack the necessary levels of managerial expertise (UN-Habitat 2004).

2.5 POLICY AND LEGISLATIVE FRAMEWORK FOR PFM

The South African Constitution, which comprises national, provincial, and local domains of government, serves as the guiding document for the management of the public sector in SA. These several levels of government are distinct, yet interdependent and interrelated at the same time (Fig 2.2). With the demand for synthesis across the many different departments of government, these areas foster the ideas of interconnection and interrelationship among all levels of government.

Essential principles that should direct cooperative efforts and ties between different levels of government are laid out in Section 41 of the Constitution. The following is a list of some of the most essential concepts, particularly those pertinent to the administration of financial affairs:

- "Effective, transparent, accountable and coherent governance must be provided for the Republic as a whole.
- No sphere of government may assume any power or function except those conferred on it terms of the Constitution.

- Each sphere of government must respect the constitution status, institutions powers and functions of the other spheres of government.
- Each sphere must exercise its powers and perform its functions in a manner that does not encroach on the geographical, functional or institutional integrity of another government sphere”

(RSA Constitution 1996, cited in Fourie and Opperman 2018: 4).

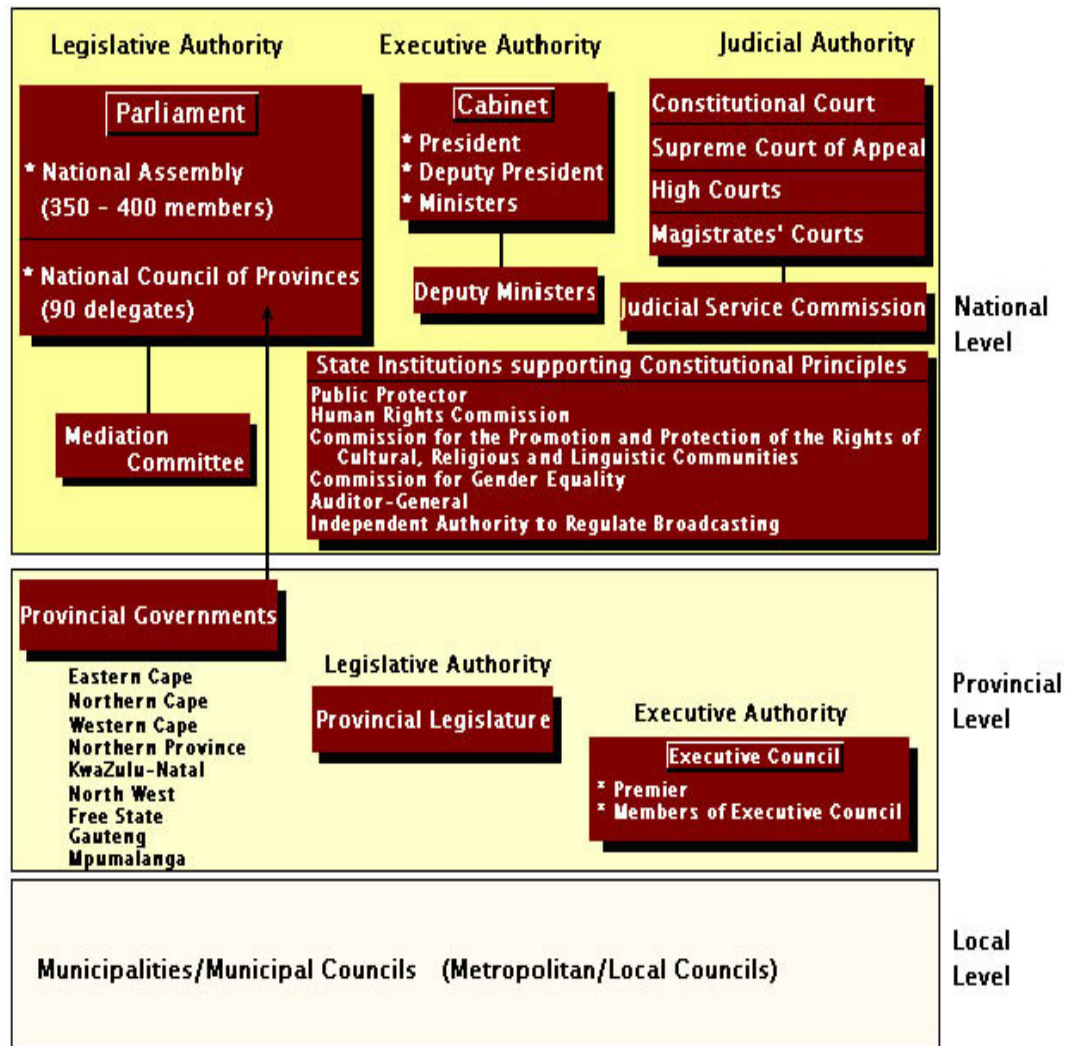


Figure 2.2: Structure and functions of the South African Government

Source: Adapted from Local Government Yearbook (2017/2018)

2.5.1 Public Financial Management Act of 29 of 1999 (PFMA)

Act 1 of 1999, which was amended by Act 29 of 1999 and renamed the PFMA, now focuses primarily on the national and provincial levels of government. Act 1 of 1999 was originally enacted as the PFMA. According to Visser and Erasmus (2002: 6–7), the PFMA effectively replaces and overrides all the former national and provincial Exchequer Acts, as well as the Reporting by Public Entities Act (Act 93 of 1992). The purpose of the Act is to establish rules for the management of public finances at both the national and provincial levels of government.

According to Khalo (2007: 67-70), the purpose of the Act (PFMA) is to "secure transparency, accountability, and sound management of the revenue, expenditure, assets, and liabilities of the institutions of government to which the Act applies." This is the aim of the Act, which is based on the purpose of the Act. It is described as the location where protocols are established for efficient and effective management of all revenue, expenditure, assets, and liabilities; it is also the location where the duties and responsibilities of government officials in charge of finances are established. In addition, the Act intends to promote accountability and openness in public institutions and the government, with the purpose of ensuring efficient financial management (RSA 1999).

2.5.2 Local Government: Municipal Finance Management Act, 2003 (Act 56 of 2003)

Local governments have a constitutional obligation to ensure all its people receive the services necessary to meet their fundamental requirements and this promise is universally applicable. Additionally, these governments must ensure this obligation is met. Communities and community organisations are given numerous opportunities to participate in the day-to-day operations of local government by the municipalities in charge of supervising these governments. Nevertheless, local governments have an additional responsibility to support the Bill of Rights, which is an expression of the nation's

principles of human dignity, equality, and liberty, and to preserve the constitutional underpinnings of the document (Van der Waladt 2018).

Fourie and Opperman (2018) confirm the municipal finance conceptual framework can be traced to the 1998 White Paper on Local Government. This framework not only supported the local government sphere developmental role, it also proposed a new system to deal with the basic source of municipalities' financial problems. This was meant to "empower municipalities to fulfil the constitutional mandate, and to balance programmes for poverty eradication and equity with strategies to enhance growth, job creation and competitiveness" (Fourie and Opperman 2018: 8-9).

In addition to this argument, the authors contended the White Paper advocated a reorganised system of municipal finance in order to fulfil the constitutional mandate, which conformed to seven essential principles. This argument was in addition to the argument presented above. These principles included adequate and certain revenue, sustainability, the effective and efficient use of resources, and accountability, along with transparency, good governance, as well as equity and redistribution, development and investment, and microeconomic management. Furthermore, these principles emphasised the importance of microeconomic management. The authors argued the Constitution requires a system of municipal finance to adhere to, with the MFMA having modernised the way municipal finances are administered by making these fundamental policy ideas into statutory obligations. In support of this claim, the authors stated the Constitution mandates a system of municipal finance be adhered to (Fourie and Opperman 2007).

According to Van Der Waladt *et al.* (2018: 87), it has been established the MFMA is a component of the legal reforms and transformation framework outlined in the White Paper on Local Government (1998). Within the field of municipal administration, the MFMA establishes the framework for organised and effective financial management principles and practises that can be

implemented. Additionally, according to Van Der Walddt (2018), the MFMA is the law that establishes norms and standards for the financial administration of the local government, whereas the PFMA, Act 1 of 1999 (as amended by the PFMA 29 of 1999), is the law that establishes these for the national and provincial domains of government. Van der Walddt (2018) describes the purpose of the Act as four-fold:

- “To regulate municipal finance management
- To set requirements for the efficient and effective management of the revenue, expenditure, assets and liabilities of municipal entities
- To define the responsibility with regards to municipal finance management
- To determine a financial management governance framework for municipal entities”

(MFMA Act 56 of 2003).

As highlighted by Nkuna and Sebola (2012: 158), the purpose of the Local Government MFMA is to ensure the secure and responsible management of the financial affairs of municipalities and other institutions that operate within the domain of government considered local. The summary presented earlier lends support to this goal by providing evidence in its favour. To achieve this objective, first the treasury rules and standards for the local level of government need to be developed, and then the goods pertinent to those rules and standards need to be delivered. The MFMA is the legislation that serves as the legal basis for the financial management of local governments. With regard to issues that concern the management of monetary assets, each municipality is required, in their capacity as a local government, to comply with the provisions of this Act. This obligation applies to all issues that may arise.

In addition to modernising municipal budgeting and financial management, the MFMA also introduces a governance framework for separate entities created by municipalities, as highlighted by Fourie and Opperman (2018: 10). The MFMA's primary objective is to modernise municipal budgeting and financial

management (Table 2.1). The MFMA promotes openness and transparency in local government in SA by imposing standards on budgets and reports. This Act is an essential component of the overall reform of local government in the country.

2.5.3 Local Government Transitional Act 209 of 1993

This Act dealt extensively with municipal financial management, but was later replaced by the Local Government: MFMA, Act 56 of 2003. “It is, *inter alia*, prohibited for councillors and employees of municipalities to accept commission, remuneration or reward from any other party or person than the municipality, and they may not perform other improper actions” (Thornhill & Cloete 2014: 107). The major highlight of this act thus prevents external influence in fund mismanagement within councils.

2.5.4 Intergovernmental Fiscal Relations Act 97 of 1997

The Local Government Budget Forum was initially constituted as a result of this act on January 1, 1998, and went into effect on the same day. The goal of the forum is to provide consultation on any fiscal, budgetary, or financial problem relevant to the realm of local government. Any proposed legislation or policy that has a financial implication for local government, as well as any matter concerning the financial management or the monitoring of finances of local government, is subject to analysis by the forum. Moreover, anything that relates to the management of the local government's finances or the monitoring of those finances will also be subject to investigation and evaluation. The purpose of this Act is to define a method for the determination of an equitable sharing and allocation of revenue produced at the national level; to encourage co-operation between the national, provincial, and local domains of government on fiscal, budgetary, and financial concerns; and to define a method for the determination of an equitable sharing and allocation of revenue.

2.5.5 Local Government: Municipal Systems Act 32 of 2000

In order to ensure all citizens have universal access to essential services at prices affordable to them, the Local Government Municipal Systems Act was enacted. The Act also provides the principles, mechanisms, and procedures necessary to make it possible for municipalities to achieve steady progress toward the social and economic betterment of the communities they serve. Additionally, this act guarantees all citizens will have access to such services. It defines the legal nature of a municipality to include the local community within the municipal area, working in partnership with the political and administrative municipal structures established in accordance with the Local Government Structures Act. This act also establishes that the local community is considered part of the legal nature of the municipality, with this legislation also defining the legal status of municipalities in the eyes of the law.

Significant emphasis is placed by this legislation on empowering individuals with low incomes and ensuring municipalities put service tariffs and credit control policies in place that consider the needs of individuals with low incomes. Added to this, it requires the different other levels of government to develop a structure for the provision of support, monitoring, and the establishment of standards. Moeti *et al.* (2018) assert the objective is to:

"[...] gradually build local government into a frontline development agency that is efficient, with the capacity to integrate the activities of all spheres of government, in order to elevate communities for their overall social and economic benefit, in harmony with their local natural environment."

In other words, this objective will be realised over a period of time, and it will be done so by progressively transforming local government into an effective frontline development agency.

The Act offers towns a great deal of autonomy, which enables them to corporatise their services, form utilities for the provision of services, or enter partnerships with other service providers. The Act requires towns to develop a credit-control policy, which, among other aspects, stipulates services must be terminated should payment not be received. The authority to create bylaws as a means of putting the policy into practice lies with the municipalities, which also hold the ability to do so.

The objective of the Local Government: Municipal Systems Amendment Act is to professionalise local government in order to improve service delivery and performance management, as well as to establish in municipalities a local government mind-set centred on the requirements of the people. Another objective of this act is to ensure local government is more responsive to the needs of the people. One of the most essential objectives of the Act is to gradually align the administrative and HRM structures of municipalities, with those of the Public Service in the national and provincial governments. This is one of the most important purposes of the Act (Local Government Year book 2018).

2.5.6 Local Government: Municipal Government Structures Act 117 of 1998

Fourie and Opperman (2018) argue the primary focus of this act is on establishing municipalities, electing municipal councillors, and the municipal council composition, membership, operation and structuring. This Act also impacts financial management and provides for the establishment of municipalities consistent with requirements in relation to the categories, types of municipalities, and for appropriate separation of powers and functions between these categories of municipalities.

In a chapter prepared by Nkuna and Sebola (2012: 154, cited in Moeti *et al.* 2018), the authors discuss a synopsis of the Municipal structures Act (MSA). In particular, the legislation passed by parliament to provide for establishment

of municipalities in accordance with conditions relating to the many different categories and types of municipalities that can be founded. The Municipal Demarcation Board will use the criteria outlined in the Act to determine the type of municipality that will be established in a particular territory, with the Act outlining these criteria.

The Act will decide which entries are taken up in this category. In addition, it regulates the internal systems, structures, and office bearers of municipalities by providing for proper election systems and other connected concerns. This is done so it can control the internal affairs of the municipalities, while it also makes provisions for the equitable distribution of functions and powers among the various classifications of municipalities. The circumstances under which a municipality is founded serve as the criteria for assignment of roles and responsibilities in financial management, relative to the municipal category.

The categories of municipalities are outlined in Article 155, Section 1 of the Constitution:

- a) “Category A: A municipality with exclusive municipal legislative and executive powers in its area.
- b) Category B: A municipality that shares legislative and executive powers in its area with a category C municipality.
- c) Category C: A municipality that has legislative and executive powers in an area that includes more than one municipality”.

Van der Waldt (2018: 49) confirms the national legislative “must prescribe measures for the determination of which category of municipality must be instituted in an area, as well as of municipal boundaries by an independent authority” (Section 155(2)).

2.5.7 Integrated Developmental Planning

According to the Intergovernmental forum for effective planning, the definition of integrated development planning describes it as a participatory planning process aimed at the integration of sectoral strategies, to support the most advantageous scarce resource allocation across the population between sectors and geographical areas “in a manner that promotes sustainable growth, equity and the empowerment of the poor and marginalised” (RSA 2001).

All municipalities are obligated to create and legally implement IDPs under the Local Government: Municipal Systems Act, Act 32 of 2000. Municipalities construct five-year strategic plans evaluated annually in cooperation with communities and other stakeholders under integrated development planning. The purpose is to achieve successful and long-term service delivery and development goals in municipal regions.

From this, Van der Waldt *et al.* (2018) posit,

“IDP is all about people, balance and equity, and recognizes that the most important task of any development effort is to create a meaningful opportunity for people to empower themselves. Integrated, development planning also recognizes the fundamental need for balance among the economic, ecological and social systems of communities”

(Pieterse 2001: 4)

Through these interventions and resources, local role players and interest groups are mobilised to achieve economic growth and create jobs to reduce poverty (Local Government Yearbook 2018/2019). These acts guide the management of municipalities and have gatekeepers who play different roles.

2.6 PFM AND MUNICIPAL ACT AND THEIR IMPLICATIONS ON LOCAL AUTHORITIES

A longstanding problem in the field of Public Management has been the provisioning of services to communities within municipalities. Democratic principles embrace the introduction of a variety of policies and Acts contained in the legislative framework. Alongside these important areas, however, several challenges have surfaced for policy implementation in the provisioning of services and financial problems in all government spheres. For example, Chapter 13 of the MFMA deals with the resolution of financial problems. When the Member of the Executive Council (MEC) for Local Government becomes aware of a serious financial problem in the municipality, the MEC is required to promptly consult with the mayor of the municipality to determine the facts, assess the seriousness of the situation, and justify the municipality's response to any situation that requires an intervention in terms of Section 139 of the Constitution.

Section 136 deals with the types of provincial intervention and provides, in the event the MEC becomes aware of a serious financial problem in the municipality, consultation with the mayor is required. This rule is strictly applicable in situations where the municipality's financial predicament was brought on by, or was a consequence of, the municipality's failure to comply with an executive responsibility imposed by a piece of legislation or the Constitution.

Stated broadly, as advanced by Fourie and Opperman (2018: 561), when the municipality does not perform its functions satisfactorily, the provincial executive may intervene. Such an intervention is, therefore, entirely conceivable in the case of general maladministration, inadequate service delivery and so forth. However, it must be clearly understood that Chapter 13 of the MFMA concentrates specifically on the process of the intervention necessary when there are "serious financial problems" in a municipality. A serious financial problem is, of course, not always the reason municipal

performance is unsatisfactory. Indeed, there can be a complete breakdown in service delivery owing to poor planning and general technical incompetence (or both), in municipalities where only minor financial problems are evident (Fourie and Opperman 2018).

Legislation governing the public finances and accompanying regulations need to adopt a more contemporary approach to financial management. This should be done with the intention of reducing instances of fraud, corruption, and waste in order to make public resource use more efficient and effective. For the public sector, there is an evident need for a theory of professional management that is hands-on; this is necessary to maximise government capacity to provide services. A strategy that provides operational managers with the ability to manage while, at the same time, holding "them accountable for the resources they consume." According to Jordaan (2017), in order to put this plan into action, clear responsibility lines need to be built, in addition to substantial frameworks of best practises that managers can either accept as-is or modify as necessary, with a greater emphasis on output controls (Jordaan 2017).

This has led to an increased academic effort to address matters, ranging from the many failures and challenges of financial management problems, to factors affecting service delivery in the municipalities, through empirical studies.

"It was now essential of municipalities to function as the leading development agencies within the entire government" (Atkinson 2002). This new developmental role is spelled out in section 153 of the Constitution, which provides a municipality must "(a) structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community; and (b) participate in national and provincial development programmes." This provision mandates a municipality must prioritise fundamental community needs and encourage community development, both socially and economically.

In the White Paper, the purposes of local governments were translated into the concept of "Developmental Local Government," which was defined as "...local government committed to working with citizens and groups within the community to find sustainable ways to meet their social, economic, and material needs and improve the quality of their lives." Section 152 of the Constitution outlines the purposes of local governments. A variety of characteristics are attributed to the idea of developmental local government, including the following: maximising social development and growth; integrating and co-ordinating; democratising development, and empowering and redistributing; as well as leading and learning. These are just some of the characteristics (Siddle and Koelbe 2019).

The MFMA (Local Government) requires stringent central oversight of the management of municipal finances. With many municipalities unable to implement good financial management practises, despite extensive instructions provided by the MFMA, their inabilities are a key cause for concern. A municipality has the right to use its own resourcefulness to govern, the affairs of its community, regarding local government, with the proviso it adheres to national and provincial legislation, as provided for in the Constitution, according to Section 151(3) of the Constitution. This provision states: "A municipality has the right to govern, on its own initiative, the local government affairs of its community."

Reports of the AG (2018-2019), such as the Consolidated AG's Report on the Audited Outcomes of Local Government, issued on an annual basis, is an excellent starting point to gain an understanding of the challenges associated with the administration of local finances. The AG is the highest-ranking auditing body in SA and is responsible for conducting audits of all municipal governments, as well as other state agencies and departments.

The AG not only examines the integrity of municipal financial records, but also their yearly performance reports and compliance with relevant legislation. Municipal audit results are divided into many categories, where the financially unqualified opinion with no findings, also known as a "clean audit," is the most coveted category in municipal auditing, and considered as the "holy grail" of municipal auditing (AG 2018-2019).

For example, The National Treasury (2011), citing the South African National Energy Regulator (NERSA), lists a number of reasons that undermine the long-term viability of municipal electricity provision. The first is that most equipment is overburdened and aging, and its reliability is degrading; this is accompanied by an increase in maintenance costs.

Few municipalities have effective programmes for planned or preventative maintenance, databases of assets, or contingency plans, and many municipalities do not have enough inventories of replacement parts. In addition to this, there have been insufficient funds reserved for the expansion of the network. Obviously, a lack of competence is one of the most significant problems that lie beneath the surface. The South African Institute of Chartered Accountants (SAICA) notes the skills shortfall is most severe in the distribution sector or in municipalities, with many towns unable to satisfy their commitments. Although Eskom, for instance, has a substantial skills deficit at all levels, the gap is most extreme in these two areas (SAICA 2011).

In order to facilitate decentralisation and deal with the inevitable challenges that such processes bring, SA has adopted an extremely complex and sophisticated framework that reflects all of the characteristics of a decentralised system, designed in a way deemed appropriate to facilitate decentralisation. In a number of different senses, we might say it exemplifies "best practise." Despite this, the municipal government in SA faces several challenges, with most appearing insurmountable. Is the local government of SA ultimately successful in accomplishing the developmental goals it has set

for itself? To what extent does this Rolls-Royce of frameworks contribute to or detract from the accomplishment of those goals? According to what Manor said, has SA, by embracing such a paradigm, allowed the ideal to triumph over the practical? Has Grindle's (2004) notion of "good enough governance" been exceeded by the framework in any way?

2.7 KEY ROLE PLAYERS AND STRUCTURES IN MUNICIPAL FINANCE MANAGEMENT

Figure 2.3 is a rich picture depiction of key role players in financial management in municipalities. Those involved in direct operations of the municipality have direct bearing on financial performance, while those that may seem to have an indirect link, though they do not run the institutes, also exert a certain type of influence. The key roles of these actors are pictorially discussed below:



The above representation is the hand-drawn rich picture of Key Role Players and Structure in Municipal Finance, which the researcher then developed digitally, as pictured below (Figure 2.3).

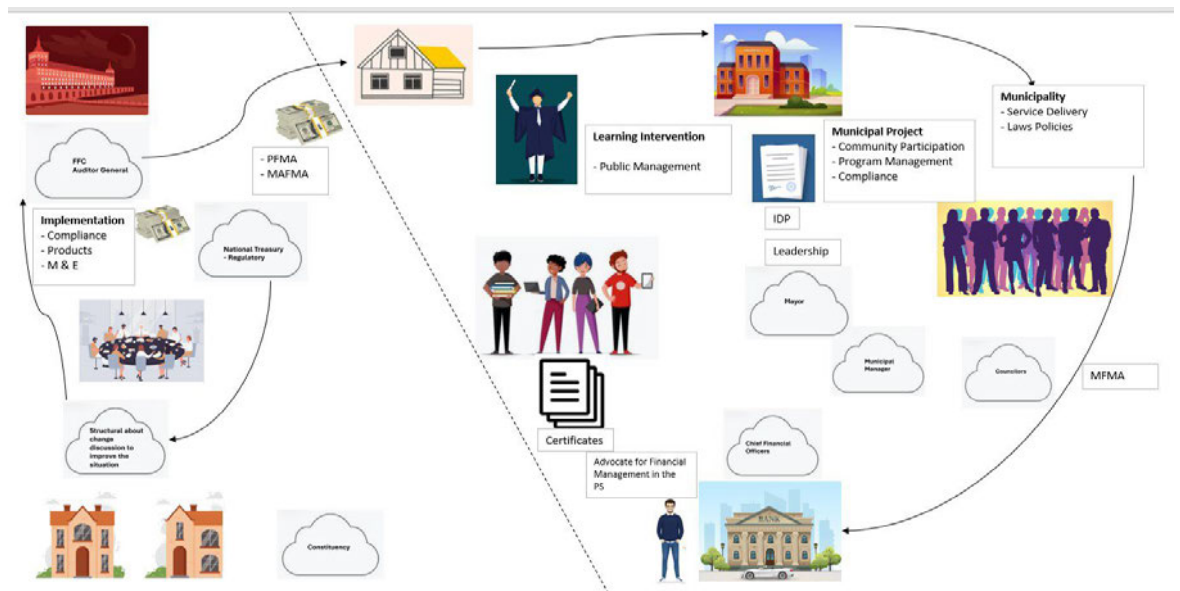


Figure 2.3: Rich Picture of Key Role Players and Structure in Municipal Finance

Source: Developed by researcher

In providing insight into financial management in municipalities, Figure 2.3 showcases key role players as direct, as well as indirect individuals, with significant influence over financial performance. It presents an intricate visual representation of stakeholder relationships around managing municipal finances, highlighting a range of external and internal players. External bodies, such as the AG and Public Protector, are instrumental in supporting democracy and good governance by enhancing transparency and accountability within municipal finances. At the top of this picture (figure 2.3) parliament is shown to serve as a supreme decision-making body, responsible for shaping national policies, impacting municipal finance regulation

compliance standards municipalities are expected to follow within the political context of SA.

On exploring its secondary layer - internal stakeholders - we find mayors, councillors, CFOs, along with MMs, entrusted with crucial roles concerning direct involvement with all aspects related to managing finances within local government areas.

Municipalities' economic stability lies in the hands of actors who make decisions regarding budgeting, procurement, and revenue collection - essential components determining its overall fiscal health status, directly tied to these individuals' efficacy rate when carrying out their functions within their respective roles within municipal governance structures. Furthermore, there are indirect actors, whose efforts focus on facilitating activities such as capacity-building programmes or financial training opportunities, with universities accounting for one example.

By utilising SSM, accompanying rich picture approaches highlight fundamental aspects influencing different elements at play - both externally or internally. Figure 2.3 offers a comprehensive snapshot detailing all involved parties at prominent levels, amidst what can only be described as an intricate web of interdependent relationships. Effective collaboration and communication among the actors become critical, as it ultimately leads towards achieving successful municipal financial management systems.

2.7.1 External Role Players

2.7.1.1 National Treasury

The National Treasury was founded in order to administer the financial administration of state ministries on behalf of the legislative body, Parliament, and the executive authority. This responsibility falls under the purview of the National Treasury; typically a public institution that is given the responsibility of enhancing the financial authority of the legislative and preserving order in

the administration's dealings with financial matters. It has developed into a public entity that ensures constant control of all public financial activities, while at the same time, making it possible for more tolerance during the drawn-out and rigorous processes of parliamentary procedures.

The PFM oversight responsibilities have been elevated to the highest administrative agency in the hierarchy, which is now the National Treasury. Due to its standing, it has the right to demand a voice in all matters pertaining to the nation's public finances. According to Khalo (2007), the role of the National Treasury is to ensure the financial policy established by Parliament is correctly interpreted and properly executed by all three branches of government.

2.7.1.2 Auditor-General (AG)

The AG is assigned by the Constitution with the duty of conducting audits and submitting reports on the accounts, financial statements, and financial management of all national and provincial state departments and administrations, in addition to all municipalities and any other institution or accounting entity subject to two spheres of government. According to Cloete (2005), the AG may

“[...] audit and report on the account, financial statements, and financial management of any institution funded from the National Revenue Fund, or provincial revenue fund, or by any municipality, or any institution authorised by law to receive money for a public purpose, in addition to the duties prescribed by the legislation. An act of Parliament appoints the Auditor-General”.

The AG delivers reports to any legislature with a direct interest in the books of accounts of municipalities, and these reports are a matter of public record. The CFOs must work together with the AG to ensure appropriate systems are in place to meet their criteria for timely and accurate reporting.

2.7.1.3 Financial and Fiscal Commission

The Financial and Fiscal Commission is an advisory body created under the Financial and Fiscal Commission Act 99 of 1997 to

“[...] make impartial recommendations on what constitutes an equitable distribution of nationally raised revenue among the various spheres of government, as well as other issues relating to the intergovernmental fiscal relations system. The commission's recommendations on issues of equitable revenue distribution among national, provincial, and local governments, as well as any other allocations of local government or municipalities from the national government sphere's share of that revenue, and any conditions under which these allocations should be made, are submitted to the minister of finance at least 10 months before the start of the financial year” (Khalo 2007)

In this regard, the external role-players in financial management within municipalities, therefore, monitor and regulate financial management to a certain extent; with all engagement processes requiring compliance and adequate communication. External role-players facilitate information sharing, consensus building, and broad-based participation, which enables them to identify, review, and expand upon priority municipal issues, effecting sustainable growth and development. External stakeholders seek to promote democratic society and enhance transparency and accountability, with their influence crucial in decision-making and they can better relate to the essence of municipal dynamics.

2.7.2 Internal Role players

2.7.2.1 Councillors

When it comes to the process of approving the budget, the councillors are tasked with an essential role. The budget is the instrument that translates

strategies into concrete steps (Vys-Doorgapersad *et al.* 2017). As a result, councillors play an extremely important part in ensuring the budget accurately reflects policy priorities. There is a significant obligation placed on councillors to act as facilitators of consultations with a variety of stakeholders, most notably the community, and to ensure the budget takes the needs of the community into account to the greatest extent practically possible. This obligation is part of the significant responsibility councillors carry. Therefore, councillors should focus their efforts on allocating budget inputs (resources) among competing priorities, in a manner congruent with the strategic plans for the municipality outlined in the IDP.

The “community and other stakeholders will hold councillors accountable for service delivery. Councillors must approve credible, and realistic revenue and expenditure estimates. To do this, councillors will have to take a longer-term view of the municipality's financial position to ensure a long-term financial stability” (Vys-Doorgapersad *et al.* 2017).

2.7.2.2 Role of the Mayor

The role of the mayor includes giving overall political leadership on problems pertaining to the municipality's finances and economic situation. The Act mandates mayors are responsible for monitoring and supervising the obligations allocated to the MM and CFO, although they are not permitted to interfere with either of their jobs in any way.

Additionally, it is the responsibility of the mayor to ensure the municipality operates within its budgetary constraints and to provide a report to the council on implementation of the budget, as well as the current financial situation of the municipality; this should be done within 30 days of the end of each quarter. A municipality that does not have a mayor is obligated to appoint one of its council members to serve as mayor and carry out the responsibilities and tasks stipulated in the Act. This appointment must be made by the council. In cities

that have executive committees, it is customary for the mayor to carry out these responsibilities after consulting with the executive committee.

2.7.2.3 Role of the Municipal Manager (MM)

The management of a municipality's finances requires a MM as an essential figure. The Act stipulates the MM is obligated to offer direction and counsel to the political institutions, political office-bearers, and officials of the municipality. In addition, the MM is responsible for managing the financial issues of the municipality in an honest and honourable manner, while also keeping an eye out for what is in the best interests of the people living there. The MM is, basically, accountable for making certain any and all available resources are utilised in a method that is not only effective but also efficient and economical, as the municipality's accounting officer, according to the MSA and the provision in Section 1 of the MFMA.

According to the provisions of Section 57 (6) (a) of the MSA, the MM is appointed for a set term of employment that can last a maximum of five years, but it cannot extend beyond one year following the election of the municipality's next council. Moreover, the council must appoint an acting MM under Section 54A (1)(b) in the circumstances and for the duration specified by the regulations. Furthermore, anyone designated as a MM or acting MM must, at the very least, possess the necessary skills, competence, abilities, and qualifications.

2.7.2.4 Role of the Chief Financial Officer (CFO)

In accordance with Section 56 of the MSA, the CFO is appointed by the municipality's council. The CFO and acting CFO must have the necessary abilities and experience to carry out the responsibilities of the position. They must meet any stipulated criteria for this position in terms of skills, expertise, competencies, and qualification, but "while taking into account the protection or promotion of individuals or groups of individuals who have been disadvantaged by unfair discrimination" (Fourie and Opperman 2018: 77).

According to subsection (2) of Section 56, the appointment of a person as CFO or acting CFO when that person does not possess the essential abilities and competencies renders that appointment, as well as any contract between the municipality and the appointee, void. In addition, Section 57 mandates the appointee must sign a performance contract with the municipality within 60 days of being appointed; if this is not done, the appointment is null and void. Additionally, Section 57 mandates the performance contract must be renewed annually within one month of the beginning of each New Year. According to the MSA, the CFO is obligated to fulfil certain authorities or obligations (Section 63).

The requirements for municipal financial management are vast but straightforward. The legislation governing all role player responsibilities and requirements is likewise clear and simple, thus these rules, along with municipal financial policies, should assist successful management of public finances and the delivery of world-class service. These Acts also emphasise the obligation of all role players in municipal financial management to become familiar with their respective requirements and responsibilities, as well as to guarantee guidelines and policies are properly interpreted and implemented. The roles of individuals discussed above are clear and unambiguous, therefore, as the legislature provides for a simple guideline, it is pertinent for role players to maintain the laws to ensure continuity and efficiency in the delivery of services as prescribed by the statutes of law.

2.8 PUBLIC SERVICE DELIVERY AND FINANCIAL MANAGEMENT GOVERNANCE

With regard to financing, the focus in public administration is on prioritising and utilising limited resources, ensuring good stewardship of public funds and assets, and giving value for money in order to achieve government objectives such as providing the best available services. Other important considerations include ensuring effective stewardship of public funds and assets. This needs

to be carried out in an open and honest fashion, while also adhering to any laws now in effect. The formulation of fiscal policy, the preparation of budgets and their execution, as well as the management of financial operations, are all components of the government's finance function. Accounting, auditing, and assessment are the other components of this role.

The capacity of a government to offer the services it provides to its inhabitants, in addition to paying for those services, is closely tied to the capacity of that government to provide such services. The government is responsible for disbursing and collecting public funds in the form of taxes, tariffs, levies, and fees, as well as receiving loans and fines from members of the general public. These are the most important avenues via which the state brings in money for the public treasury (Botes *et al.* 2014). The money spent by government is not money that belongs to the government; rather, it is money that belongs to the people. However, people are concerned their money is not being spent in an appropriate manner by governments; as a result, they want to know “how and why” their taxes are being spent in order to allay those concerns. As a direct consequence of this, governments have an increased responsibility to be more performance-driven and results-oriented (Pauw *et al.* 2002).

PFM includes:

“[...] resource mobilisation, prioritisation of programmes, the budgetary process, efficient management of resources and exercising controls. Rising aspirations of people are placing more demands on financial resources. At the same time, the emphasis of the citizenry is on value for money measured in terms of economy, efficiency and effectiveness, thus making public finance management increasingly vital” (Jordaan 2017).

PFM therefore, refers to:

“[...] the set of laws, norms, procedures, and processes that sovereign nations (and sub-national governments) employ to raise revenue, allot public funds, spend publicly, account for monies, and audit results. It covers a greater range of functions than financial management, and it's usually thought of as a six-phase cycle that starts with policy development and ends with external auditing and evaluation A large number of actors engage in this 'PFM cycle' to ensure it operates effectively and transparently, while preserving accountability” (Lawson 2015)

2.9 REVIEW OF LEADERSHIP, LEADERSHIP STYLES AND THEORIES

After going over the primary differentiation between the terms "leadership" and "management," the next step in this investigation is to discuss the different leadership philosophies and approaches, as well as the different schools of thought on the problems leadership faces as an area of study intertwined with all other academic fields. It is imperative this be done.

According to Manz *et al.* (2016: 3), leadership is "the leader's ability to lead himself and lead others to lead themselves" (the ability of the leader to lead others to lead themselves). Horner (1997: 270-287) considers leadership to be a collective rather than an individual accomplishment because of this perspective.

Graetz (2000) clarifies the advantage of leadership lies in that it

“[...] encourages productivity and reduces conflicts, organisation turnover and absenteeism. It elevates employees' self-esteem and job satisfaction. It encourages employee commitment to goals; and it allows for better flow of communication” (Shokane, Stanz and Slamber 2004)

Furthermore, Kuye (2014) emphasises the importance of good leadership has made it a common topic in both the corporate and political arenas around the world. International organizations such as the United Nations (UN) and superpowers such as the United States of America (USA) and the United Kingdom (UK), have made it their mission to help ensure governance by all countries through principles such as regular and free elections. Other aspects mentioned by the author include sovereignty, rule of law, multi-party democracy, and universal suffrage, as well as the protection of human rights, security and peace.

Although each of these schools of thinking assumes a somewhat individualistic perspective on the leader, "dispersed" leadership is one school of thought receiving greater respect as a viable alternative. This viewpoint, which has its origins in sociology, psychology, and politics, rather than in management science, considers leadership to be a process dispersed throughout an organization rather than viewing it as the sole responsibility of the person formally designated as the "leader" of that organization. Consequently, the focus moves from the cultivation of "leaders" to the cultivation of "leaderful" organizations, which have a shared responsibility for leadership (Bass 2000).

In their book titled "Transformational Leadership," published in 2000, Tichy and Devanna further developed the work Burns and Bass had done in organisational and work environments. They highlighted the hybrid nature of transformational leadership as not being dependent on charisma (person-centred), but rather viewing leadership as a behavioural development attainable via learning. Bass and Avolio (2001) suggested "Transformational leadership is closer to the prototype of leadership that people have in mind when they describe their ideal leader, and it is more likely to provide a role model with which subordinates want to identify". In his book titled "Principle-Centered Leadership," Stephen Covey makes the argument that transformational leadership "... focuses on the 'top line.'" This provides a comparison between the two types of leadership.

Recent change agents who were pioneers in the field are participating in the leadership discussion in a variety of distinct and unique ways. These leaders are attempting to maximise growth in addition to success in their organisations. The development of more mature abilities, inspiration, attitudes, and values is necessary for growth. These leaders strive to bring the demands of their employees up to a more mature level, moving on from the need for security to the need for achievement and self-development. They motivate their co-workers to strive for greater accomplishments, as well as higher standards of morality and ethics, while at the same time, they work to maximise the profitability of their firm by establishing business relationships with other organisations. Nonetheless, high-performance organisations can only be built with high-performance partners (Judge & Piccolo 2004), which instigated a brief description of transactional and transformational leadership below, as these have a greater influence on adaptive leadership.

2.10 TRANSACTIONAL AND TRANSFORMATIONAL LEADERSHIP

A considerable body of study on transformation and transactional leadership theory has been accumulated over the last century (Judge & Piccolo 2004). Several studies undertaken during this time have found transformative leadership has much traction. According to a search of keywords in leadership styles and types of materials published from 2000 to 2016, more research has been done on transformational or charismatic leadership, than on any other popular theories of leadership (such as the least preferred co-worker theory, path-goal theory, normative decision theory, and substitutes for leadership), combined. This is the result of more research having been done on these two types of leadership than on any other popular theories of leadership (Judge & Piccolo 2004).

2.10.1 Transactional Leadership

The traditional form of leadership, transactional leadership, “has its roots in the 'bottom line' from an organizational or corporate perspective. Contingent

rewards, management by exception-active, and management by exception-passive are the three dimensions of transactional leadership” (Judge & Piccolo 2004: 755-756).

The advantages of transactional leadership, according to Kuye (2014), are that,

“[...] it is practical and allows for tactical flexibility; it ensures efficiency in terms of subordinate performance (i.e., subordinates are aware that they are being closely monitored, so they tend to perform optimally); and leadership tends to manage intervention only in cases where a subordinate's standard performance is not met. However, because of the power vested in a leader, the hands-on approach may jeopardize the relationship between the leader and the subordinate (i.e., in an event where a subordinate fails on a particular task, the leader tends to strictly reprimand without implementing corrective measures)” (Tshiyoyo 2012: 101).

2.10.2 Transformational leadership

Transformational leadership, in reality, deals with managing organizational change. Judge and Piccolo (2004: 155-168) claimed “there are four dimensions of transformational leadership: charisma or idealized influence, inspirational motivation, intellectual stimulation, and individual consideration”. Transformational leaders succeed in institutional changes with regard to ethos, technology, structure, as well as procedures, and/or production.

The authors add, “The degree to which a leader articulates a vision that is appealing and inspiring to followers with high standards, communicates optimism about future goal fulfilment, and provides purpose for the activity at hand is referred to as inspirational motivation”. Further to this, Judge and Piccolo (2004: 170-175) proclaimed the “degree to which a leader challenges assumptions, takes risks, and solicits feedback from followers is referred to as

intellectual stimulation". Individualised consideration refers to the degree to which a leader attends to the needs of his or her followers, is available as a mentor or coach, and listens to their problems. Leaders who possess this quality inspire and encourage the ingenuity of their followers.

According to Javidian and Waldman (2003), transformational leaders in the public sector are believed to possess four significant qualities in common with transformational leaders in the private sector. These qualities include vigour and resolve, as well as a clear vision, the ability to provide subordinates with opportunities for growth and encouragement, and a proper level of risk-taking. In a manner analogous to how transactional leadership was adapted to a more unchanging public administration from 1950 to 1970, transformational leadership is suited to a more chaotic world because of its emphasis on change. This parallels the way transactional leadership was adapted to a more unchanging public administration from 1950 to 1970.

In today's organisations, neither complexity (Uhl-Bien, Marion, & McKelvey 2008) nor disorder (Kiel 1994) shows any signs of persisting and fomenting change—sometimes even significant change. This is the case, despite both these phenomena shown as associated with higher levels of innovation and creativity. In spite of both being found connected with higher degrees of uncertainty and risk, this continues to be the case (Uhl-Bien *et al.* 2008).

Avolio (2010) noted transformational leadership aids in disseminating an organization's vision, strategy, and long-term objectives in business, with a lack of transformational leadership leading to more complexity and a lack of organizational goal alignment at all levels. As a result, transformational leadership ensures people's behaviours are aligned with the organization's vision, strategy, and long-term objectives, resulting in improved business operations, consistency and coherence.

Kuye (2014) maintained the following advantages are brought by a transformational leadership style:

"[...] the charisma in leadership provides vision and sense of mission, instils pride, gains respect and trust; the inspiration, ensures that higher expectations with regard to performance are clearly communicated; transformational leadership promotes intelligence, rationality and careful problem analysis and solving; and leaders tend to give personal attention to subordinates, treat each employee individually and often provide coaching and advice".

As highlighted by certain reports, the transformative leadership style, nevertheless, includes the following drawback according to Tshiyoyo (2012):

"[...] when leaders fail to inspire the subordinates, the planned task is destined to fail, despite the efforts taken by a leader to transform the situation; and communication breakdown caused by rhetoric would ensure failure of the vision that the leader holds; this culminates in subordinates being confused about which tasks to perform."

The difference between transformational and transactional leadership, according to Bass (1997: 30), is "either a matter of contingent reinforcement of followers in a transactional leader or the moving of followers beyond their self-interests for the good of the group, organisation, or society in transformational leadership." (Bass 1997). As per this interpretation, Bass and Avolio (1997) use the concept of transformational leadership interchangeably with the idea of transactional leadership to respectively define the relations between a leader and manager. Described as a form of leadership of the highest order, transformational leadership is characterised by its ability to motivate subordinates toward the accomplishment of both immediate and long-term objectives. "The ability of a leader to manage the behaviours of employees and the resources of the organisation to obtain short-term goals,"

is what is meant by the phrase "transactional leadership" (Bass and Avolio 1997: 24).

The idea of combining transformational and transactional leadership was, however, first presented by Burns (1978) in his treatment of political leadership. Both transactional and transformational leaders have a significant part to play in the operations of modern-day businesses, according to De Kock and Slabbert (2003), who noted one type of leader cannot exist without the other. The relationship between transformational leadership, transactionally contingent rewards, and organisational identification is depicted below (Figure 2.4). This connection is made possible by the mediation of corporate goals and the orientation of innovation culture (Mckelvey 2014).

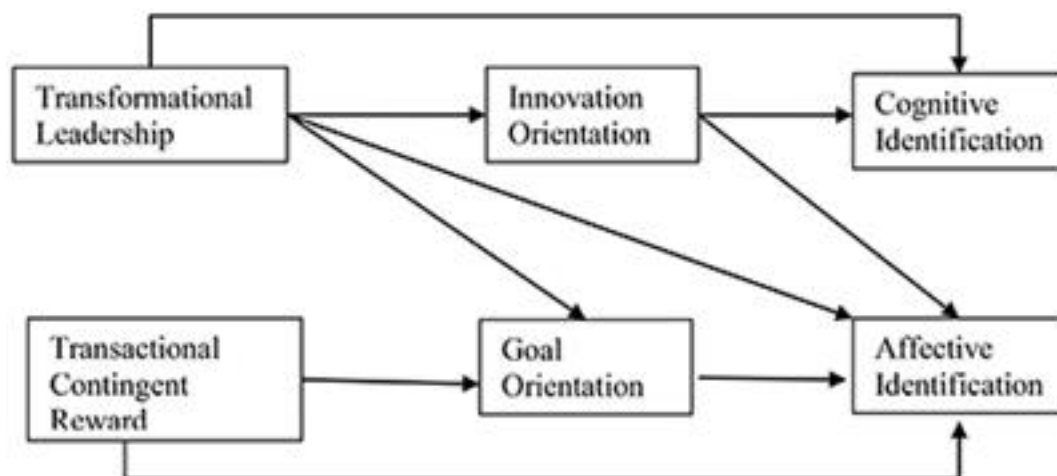


Figure 2.4: Theoretical model

Source: Adapted from Mckelvey (2014)

Bass's (1990) conceptualisation, a comprehensive account of the contrasts between transactional and transformational leadership, as well as the synergies that exist between the two. This description acknowledges the existence of passive behaviours and can be seen as a hybrid explanation (Bass 1990; Den Hartog, Van Muijen, and Koopman 1997), meaning it draws from a number of different theoretical perspectives and embraces their core elements. However, Yukl (1999) asserts several essential leadership

behaviours have been omitted from the model. This should be seen as a problem in a model of leadership known as the "full range" model, since it fails to account for these vital leadership behaviours, despite the model being extremely exhaustive.

2.11 ADAPTIVE LEADERSHIP

Heifetz and his colleagues postulate that "adaptive leadership is the practice of mobilizing people to tackle tough challenges and thrive" (Heifetz, Grashow, and Linsky 2009: 14). In complex systems, adaptive leadership is defined as an informal leadership process that occurs in purposeful acts of interactive, interdependent human agents (individuals or collectives), as they labour to produce and advance creative solutions in addressing the system's adaptive demands (Uhl-Bien & Marion 2007: 637; cf. Heifetz and Laurie 2001) and is a dynamic process that happens in social interactions. Adaptive leadership also includes the ability to distinguish between technical and adaptive issues, as well as the ability to align tactics that assist people with adaptive challenges to obtain the skills they need to overcome their obstacles (Klocker 2018).

This study draws on Heifetz's adaptive leadership models, starting with the adaptive leadership framework that acts as an overarching framework to the adaptive leadership model (Fig 2.5). Figure 2.5 depicts a situation in today's more business-oriented academic environment, whereby towns and organizations in the KZN Province must compete to attract communities, while also facing increased scrutiny and accountability from outside constituents.

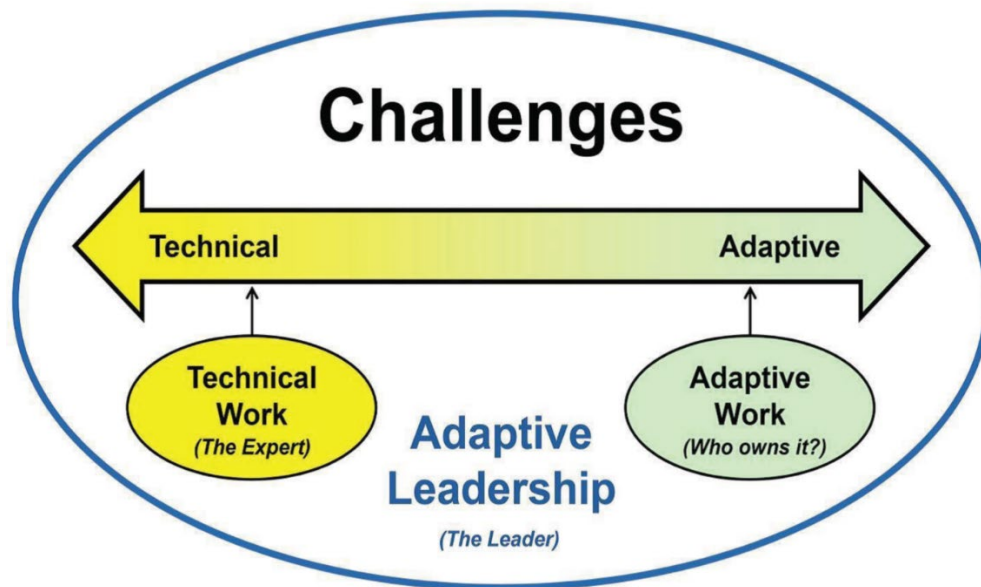


Figure 2.5: Adaptive Leadership Framework

Source: Heifetz et al. (2009)

Heifetz *et al.* (2009) proposed the adaptive leadership framework, depicted in Figure 2.5, which implies challenges in many problem contexts are likely to range on a continuum from purely technical to purely adaptive, with most circumstances containing a mix of both. Leaders, such as accounting officials, address technical difficulties with established solutions, but only the person facing the adaptive difficulty can address it.

A way of thinking that leads to adaptive change and learning and collective intelligence is needed in the organization to allow for improvement. What is required then, is a mind-set of leading towards adaptive change and learning, and tapping the collective intelligence of the organisation's citizenry to allow for quicker responses to system emergencies. Schreiber and Carley (2007) assert: "Information flow is seen as critical, and leaders must stimulate conditions that encourage interactions that both generate collective intelligence, knowledge sharing and learning, as well as a mindful culture". The authors add, "Collective intelligence is a combination of both human and social capital that becomes socially networked".

This ultimately requires leaders to move away from the previous, traditional, top-down control and isolated strategic planning style of managing and to embrace the notion that 'adaptive' leadership will be required to sustain modern-day organisational systems. Highly agile complexity leaders are able to transition between these three styles to introduce, adapt, and advance novel ideas in the form of a new adaptive order. These leaders need to acknowledge that leading to adaptability will require three types of leadership skills, including (1) operational, (2) entrepreneurial, and (3) enabling (Uhl-Bien and Arena 2017).

Adaptive leadership is, subsequently, defined as "leadership that takes place within the interdependent interactions of emergent collective action and aids in the production of emergent outcomes such as learning and adaptation" (Schreiber and Carley 2007: 232). An adaptable leadership style is considered as having two outcomes: it both generates conditions that encourage emergent collective action and allows collective action reactions to trickle back up to management leadership, allowing strategic planning and exploration (Schreiber and Carley 2007: 233).

These adaptive theories also point to the notion that workers play a significant role and are adaptive. This makes it essential for system features that can be understood and regulated, wherever possible, to construct and allow security (Hollnagel 2018). These conceptions of employees cannot be considered particularly 'new' in the field of management, as Peter Drucker, the father of modern administration, moved the focus from employees in the 1950s, to the business as its main asset and developed an opinion that companies are human communities founded on respect and trust.

The Adaptive Process

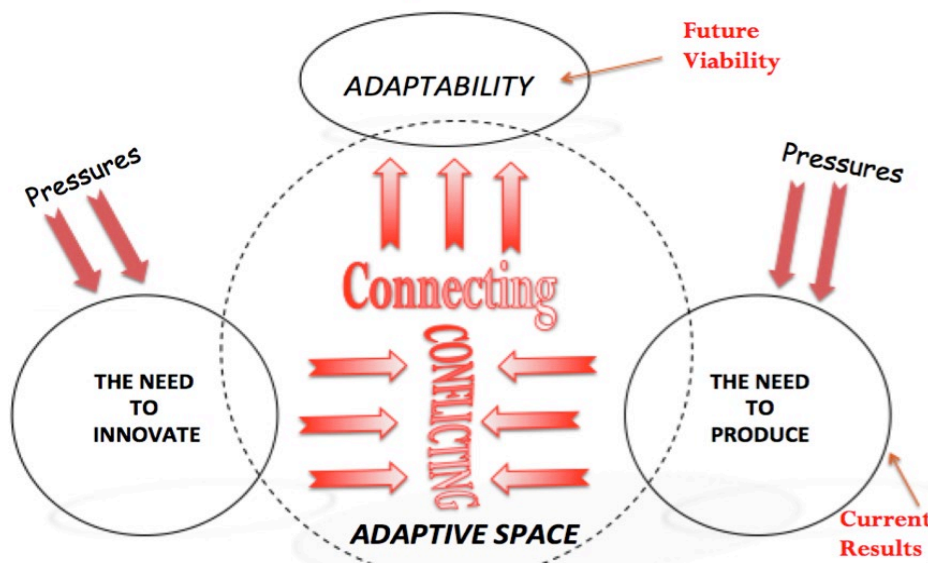


Figure 2.6: Adaptive Process

Source: Uhl-Bien *et al.* (2008)

Figure 2.6 depicts adaptive leadership as the process of arranging individuals to confront and prevail over challenging problems (Heifetz *et al.* 2009). This style of leadership recognises the environment contains both ambiguity and complexity, and it seeks out unique solutions by engaging in "organisational learning, creative problem solving, experiments, and cooperation" (Kezar and Holcombe 2017). The conventional method for leadership is based on the idea that one should provide a vision, solutions, and guidance to largely passive followers, while the leader provides them with safety. The duties of adaptive leaders are distinct because they collaborate with their teams to raise challenging challenges, question long-standing practises, and involve individuals from a variety of levels in the process of finding answers. The process of change is something followers actively participate in by way of experimenting and learning.

As a consequence, the adaptive model considers leadership more of a practise than a position or a job. It is not possible for a single journal article to adequately capture the breadth of the adaptive leadership model and practise.

However, academic librarians should first be provided with an introduction to this method that consists of a concise summary of the essential ideas (Wong and Chan 2016). The importance of diagnosing complex systemic problems, engaging stakeholders to scrutinise organisational practises and beliefs, and navigating the change process jointly through inevitable resistance, potential losses, and trade-offs, are all fundamental themes in adaptive leadership. Adaptive leadership also focuses on the importance of engaging stakeholders to examine organisational practises and beliefs. Engaging stakeholders is a requirement for adaptable leaders in order to investigate the practises and beliefs of their organisations.

The next parts, based on the writings of Heifetz, discuss three essential components of adaptive leadership (Heifetz 1994; Heifetz *et al.* 2009), namely:

- Adaptive challenges as a concept;
- the nature of adaptive changes;
- change implementation practices.

An adaptable culture can be cultivated by authoritative leaders by doing the following, as stated by Heifetz *et al.* (2009):

- Making it the norm to "identify the elephants," which means important issues should not be avoided, even when open discussion is uncomfortable, and that "troublemakers" should be protected.
- People experience a sense of shared responsibility within an organisation when rewards are primarily based on the performance of the organisation in its entirety, rather than the performance of an individual; other indicators include whether they are comfortable sharing resources, ideas, insights, and lessons across organisational boundaries.
- Encouraging a sense of shared responsibility within an organisation so people experience a sense of shared responsibility within an organisation

when rewards are primarily based on the performance of the entire organisation, instead of that of an individual.

- Encouraging autonomous judgement and distributing leadership so everyone can take the initiative in mobilising adaptive work in their respective positions; training members of the team to tolerate ambiguity and realise those in positions of power do not have all the answers.
- Establishing the group norms to ask difficult reflective questions, honouring risk-taking and experimentation, and cultivating a thirst for action by providing on-the-job experience that includes the appropriate amount of challenge, feedback, and support can be achieved by institutionalising reflection and continuous learning.
- Establish rules for the group that encourage members to ask uncomfortable introspective questions, recognise the value of taking risks and engaging in experimentation, and encourage a spirit of adventure through institutionalising reflection and lifelong learning.

Despite the function of positional leaders remaining a vital component of success, adaptive leadership places a focus on the participation of the entire team in the process of transformation. They are essential, not in the traditional sense of leading and protecting followers, but rather in their roles of orchestrating the change process alongside the team, while navigating obstacles and uncertainties, as well as creating a culture and structure that facilitates adaptive change. In this sense, they are not essential in the traditional sense of leading and protecting followers; we thus cannot consider them as leaders in the conventional meaning of the term. The adaptive leadership paradigm provides librarians with a framework, a vocabulary, and a systems perspective; it does not provide simple answers, but it can help us confront difficult challenges with strategy and fearlessness. Adaptive leadership is a systemic perspective (Wong and Chan 2016).

2.12 CONCLUSION

This chapter unravels something of the complex policy framework within which public service employees have to work. It requires considerable management application to translate policy guidelines into operational structures and provide the necessary alignment and integration. While much of what is expected of those in formal decision-making roles was detailed in this chapter, it was noted their management capability is considerably enhanced when they are able to incorporate advanced leadership capabilities to engender a culture of committed service and continuous improvement.

The concluding part of this chapter summarised the main points or debates of PFM and adaptive leadership in the public sector. The lack of leadership capabilities to improving PFM was seen as an integral part in the failure of government. The literature also focuses on how previous studies addressed this similar issue. The chapter emphasises municipal financial management in local government policies and the legislative framework associated with both municipal and PFM. Therefore, this term of inefficiencies in PFM may have a major impact within the area chosen for the study. In light of the scope of the literature review presented in this Chapter, the different theories of leadership and styles were explored, with special attention paid to South African government systems, rules, and products of policies relating to PFM. The study advocates for an adaptive leadership style, as this leadership style could be useful in addressing challenges faced by South African municipalities.

The study's literature review provided considerable views and reviews by a diverse range of authors in the quest to address leadership gaps within organisations. This study found different leadership theories and styles widely available and used across the globe. Public management and its significance to PFM was identified and explained. The important factors that relate to PFM to enhance service delivery was also a critical factor. Through the literature, this study acknowledged challenges faced by many organisations around the world and regionally.

The chapter concluded with a summary of legislative frameworks and financial prescriptions for local government. Furthermore, rich pictures were provided to demonstrate and understand the key role players of this research, which were also illustrated by means of SSM.

The next chapter will focus on systems thinking to understand the dynamics of the province and the role of PFM in support of provincial treasury regulations in the province of KZN.

CHAPTER 3

SYSTEMS THINKING IN THE PUBLIC SECTOR

3.1 INTRODUCTION

This study addresses the questions of this research, which are to determine participant perspectives and opinions that give cognisance to complex, modernised PFM structure. This is undertaken in an attempt to explore systemic weaknesses of inefficiencies for PFM affecting service provisioning. The study analyses the current challenges affecting leadership in PFM and the service delivery approach, while also ascertaining the restructuring of the state sector, which motivates employees to contribute to quality service in the history of institution-building in SA. This chapter is my research construction; thus, it required my engagement. The rationale of systems thinking is improvement and this is the researcher's intention, whereas the different systems methodologies are intended to assist the researcher to focus on different aspects of the problem.

This is enhanced by implementation of systems thinking and systems approaches. Systems thinking is complex and often contradictory, with researchers using a vast range of approaches, techniques and terminology to study similar issues. This challenge is further compounded by problems of leadership capabilities and inefficiency of financial management, in coping with the policy direction and service delivery delays inside municipalities. In this chapter, a full study of the application of SSM, SD, and CSH is offered. Particular attention is paid to the qualitative approach and design of this research, as well as an investigation of the research methodology.

3.2 AN OVERVIEW OF SYSTEMS THINKING

First, further details about systems thinking, its background, and its use in various research are provided in this chapter. This part begins with the concept of thinking, which is the activity of absorbing knowledge, organising it in an

orderly manner, and logically making sense of it all (Cabrera 2019). Systems thinking is one style of thinking that will be examined further in this section.

Systems thinking is regarded as a popular approach to resolving issues, particularly for businesses intrigued by the possibility of examining business problems in new ways. Mosekilde and Laugesen (2007) state, for example, the Beer Game, a well-known management feedback game, demonstrates the characteristics of complex systems. The beer game illustrates how complex the ramifications are when one part of a system is disturbed.

Second, the chapter aims to assess the promotion of innovation in examining management challenges and creatively solving them through systems thinking. When critically appraising problems, it is important for the purpose of this research to see them as parts of the problem-situation fallout/ 'messes', as interdependent, and occurring for different reasons. This will thus allow approaching their resolution in the 'framework' in which they are embedded in a more integrated manner. The concept of "mess" is important to identify in this research. Most of the time it is found the left hand-side is not talking to the right-hand side of the services municipalities and COGTA are tasked to deliver. Municipalities "do their own thing", without following the prescripts guided by National Treasury.

Jackson (2003) stated "systems thinking provides a range of solutions to solving problems, mostly distilling them into methodologies, while systems approaches are holistic and use 'systems' thinking, thus tackling problems thoroughly and more in-depth. The combination opens a different dimension of creativity" (Jackson 2003). The definition provided by Jackson (2003) is fitting for this research and is described in this Chapter.

The final and third aspect of Ackoff's systems thinking definition, permits systems thinking to be understood as based on how one part interacts with others, rather than the sum of its parts' actions taken separately (Senge 1990;

Ackoff 1994). Furthermore, Senge (1990) emphasises the importance of wholeness and complexity in systems thinking. The substance cannot be understood when the focus is solely on the complexity's details, without taking into account the interconnectedness, the dynamic of structural patterns of relationship between the pieces (Senge 1990).

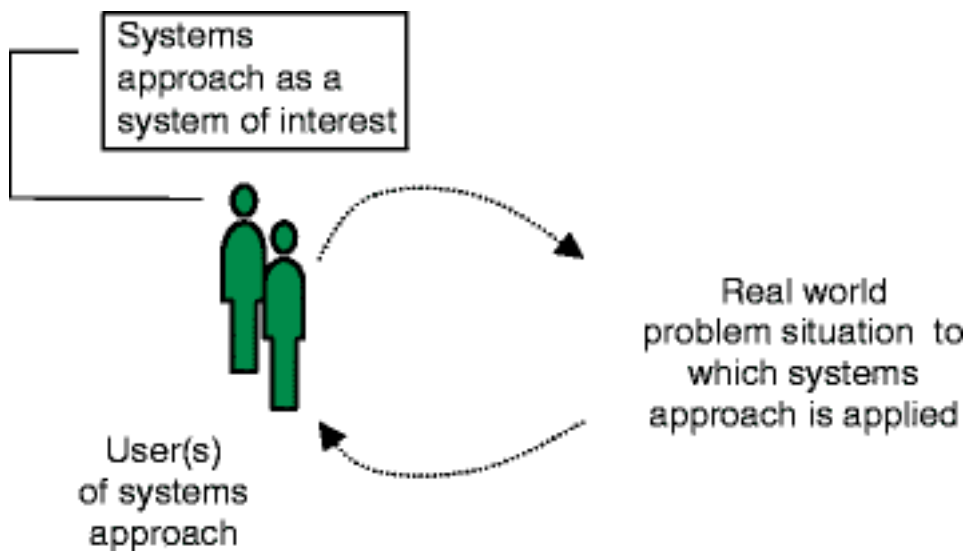


Figure 3.1: Three aspects of using a systems approach: situation, user and system

Source: Adapted from Ulrich and Reynolds (2010)

Figure 3.1 shows many of the characteristics of the approaches described by Ulrich and Reynolds (2010), and each approach has been utilised internationally in a wide range of circumstances by a diverse group of practitioners. Ulrich and Reynolds' research was published in 2010. It is possible to apply these systems approaches over a wide range of time periods, with some studies taking as little as 10–15 minutes to complete, while others take years. These systems approaches are used in a wide variety of languages and countries, each with a very distinctive intellectual history. In addition to business strategy, the topic of systems thinking also employs methodologies in the areas of organisational transformation, "information systems strategy and development," environmental planning, and international development. These are but a few of the fields where these approaches have been used. In

summary, each of these tactics has been successfully employed for a sizable amount of time (Ulrich and Reynolds 2010).

Along with these methods, the researcher believes systems thinking is an approach that offers a major contribution as a commonly recognised solution to coping with a dynamic and difficult situation in an organisation. Senge (2006) stated,

“[...] as we become increasingly overwhelmed by complexity, maintaining systems thinking is more important than ever. For the first time in history, humanity has the power to create much more knowledge than anyone can digest, to nurture far greater interdependence than anyone can manage, and to drive change far quicker than anyone can keep up”.

The extent of complexity is unprecedented, and examples of "systemic breakdowns" abound, manifesting in issues like “global warming, ozone depletion, the worldwide drug trade, and US trade and budget deficits - problems with no simple, local source”. Similarly, despite individual genius and unique products, businesses fail, owing to failure to integrate their various functions and abilities into a productive whole (Senge 2006).

According to Senge (1990), systems thinking does not imply a disregard for complexity. Rather, it entails transforming complexity into a simple narrative that emphasises the sources of problems and how they might be addressed in long-term ways. Many managers believe they lack the information they need to act effectively as the world becomes increasingly complex. Senge (1990) asserts the basic information problem managers encounter is too much, rather than too little information. What we most need are tools for determining what is significant and what is not, for determining which factors to focus on and which to ignore, and for assisting groups or teams in developing shared knowledge (Senge 2006).

3.3 SYSTEMS APPROACHES TO PRACTICE

The fundamental principles of systems have stayed essentially unaltered over the course of time, and the following sections will provide many examples of applications that simply use "the systems approach" (Figure 3.2). The following are some examples of the meaning, according to Singer *et al.* (2012):

- “Recognizing a hierarchy of levels of systems and the consequent ideas of properties emerging at different levels, as well as mutual causality both within and between levels;
- Recognizing the relationships or interactions between elements are more important than the elements themselves in determining system behavior.
- Accepting, especially in social systems, that people will act in accordance with differing purposes or rationalities”.

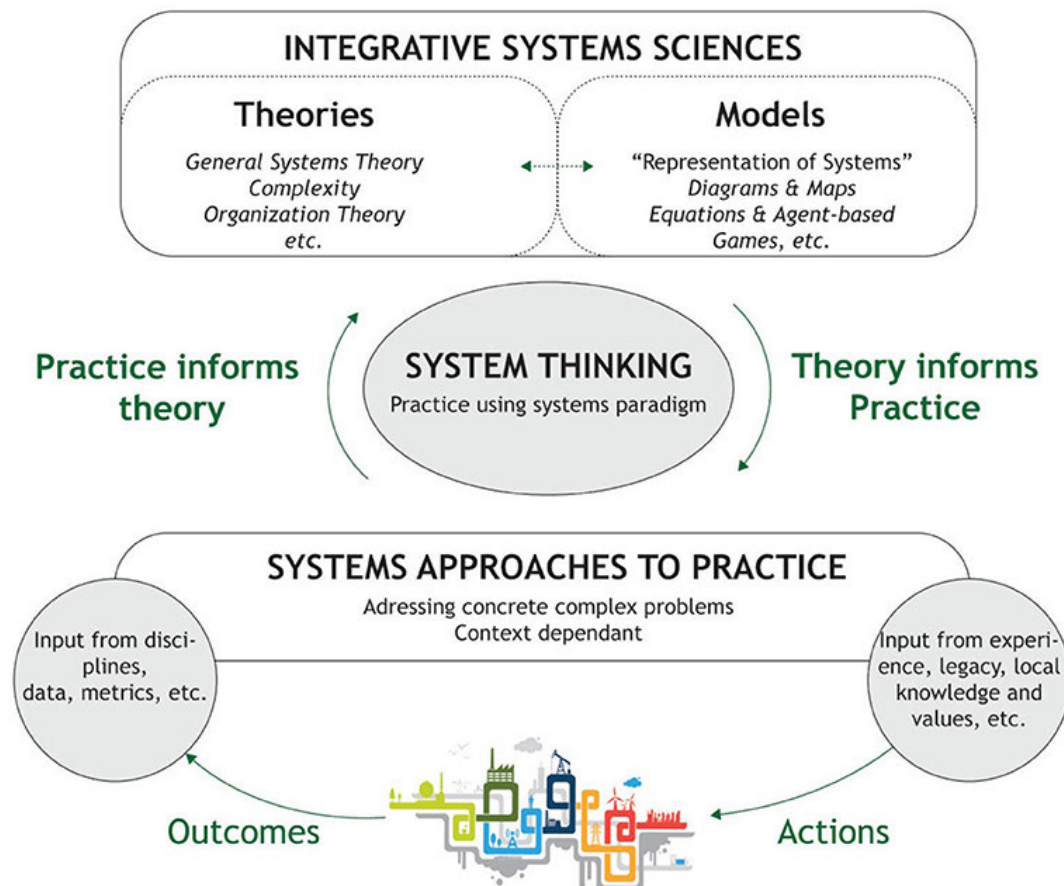


Figure 3.2: Systems Thinking using systems paradigm

Source: Adapted from Singer et al. (2012)

Senge (2004) developed the definition of systems thinking in order to solve real problems through organisational research. In organisations, the challenges as a result of fragmented knowledge and a lack of holistic learning have been noted. Ross and Wade (2015) introduced programme analysis to enhance the ability to recognise and interpret processes, forecast actions and manage improvements to attain desired results.

Systems thinking deals with specific problems in which knowledge and explanation are restricted by the complexity of the system, because of preconceptions and limitations in cognitive processing (Ross and Wade 2015). The synoptic view of systems thinking (Figure 3.2), corroborated by Ross and Wade (2015), summarises the following task sequence in applying systems thinking:

- “Identify and understand system structures that take different levels and scales into account.
- Define the boundaries, their closeness or openness, time and space scales, the level of the organization (cells, individuals, societies, ecosystems, and so on), the set of components and the connectivity between them.
- Identify and understand the dynamics of systems at various scales.
- Define flows between components, the interaction and context-dependent changes in system structure of matter, energy and information.
- Infer the impact of change on the system reliably” (Singer *et al.* 2012)

The concept of a system is “the idea of a whole entity which under a range of conditions maintains its identity, provides a way of viewing and interpreting the universe as a hierarchy of such interconnected and interrelated wholes”

(Checkland 1999a: 14, cited in Adeyunki *et al.* 2003). When working with complex systems, systems thinking and the language of systems are crucial enabling notions. Engineers can depict their findings within a solid, systems thinking plane using framework items such as rules, principles, and theorems. However, to use systems thinking to address problems, one must first organize the laws, principles, and theorems.

The use of a hierarchical organizational framework, in which general philosophies are backed by multiple more precise approaches, which are then activated by specific procedures, is a hallmark of systems thinking. "... systems thinking is based on two concepts: emergence and hierarchy, and communications and control" (Checkland 1999a: 75).

This echoes research by Flood (2010), who claims systems thinking arose from a critique of reductionism in the 20th century. Reductionism develops knowledge and understanding of things by breaking them down into their simplest components, which are then studied in terms of cause-and-effect relationships. The belief in systems thinking is that the world is systemic, which means things are seen as emergent properties of an interconnected whole. As a result, the essential notions of systems thinking are emergence and interconnectedness. When a phenomenon cannot be fully understood in terms of the attributes of its constituent parts, an emergent property of the whole is said to emerge (Flood 2010).

This research follows an approach as espoused by authors such as Checkland (1999a, 2009); Senge (2006); Flood (2010); and Reynolds and Holwell (2010), regarding the application of systems thinking in a messy or chaotic situation. The perspective on systems thinking employed builds on resolving problematic situations that intend to encourage creativity in dealing with distressing problems in an organization.

Molineux (2018) deduced that nonlinear feedback is present in “complex systems in the real world, allowing for emergent behaviour, adaptation, learning, and self-organization” (Richardson 2008). According to Flood (2010), the outcomes of these interactions and behaviours are frequently unforeseen, if not unknowable. Molineux (2018) investigates how an organization might facilitate transformational change in complicated organizational settings. For large organisational systems, a linear or step-by-step change process is frequently unproductive, therefore, Benn and Baker (2009) "suggested a cross-system (or systemic) action research approach as an alternative." A systemic action research (SAR) approach (Coghlan 2002; Burns 2007; Flood 2010) can be employed in complex pluralistic contexts, since it focuses on the dynamics of whole systems and the adaptive cycles of reflection and rethinking.

As attested by Cloete and Wissink (2000: 39), “the systems model can provide perspectives on aspects such as the influence of the environment on political policy and vice versa”. Siswana (2007: 58) states,

“Through political demands (inputs) by interest groups, it is hoped to influence the environment and conversion of these demands into public policies (output), namely the Public Service Regulations of 1999, the White Paper on transformation of the SA Public Service of 1995 and the PFMA of 1999, with the intent to change (outcome) the Public Service, both institutionally and structurally”.

There are two main perspectives on the nature of systems, which influence and distinguish the many systems approaches, according to Reynolds and Holwell (2010: 6). The nature of systems is shaped and distinguished by these perspectives. While these traditions have also been referred to as "hard" and "soft" systems thinking (Checkland 1981; Jackson 1982), with both traditions having relevance and meaning, Cabrera *et al.* (2008) explain these by making a distinction between "thinking about systems" (for example, "accounting

systems, human resource systems, ecosystems, health systems, legal systems, and more) and "systems thinking." The relative weights given to the epistemological and ontological traditions, which consider systems as representations of the real world, respectively, serve as a formal indicator of the divide (systems as learning tools for exploring the real world).

According to Holwell and Reynolds (2010), the dominant school of thought regarding systems at the time was predicated on the tacit assumption that there are systems out there in the wider world. In a recent study, Mella and Gazzola (2018) highlighted systems thinking as a discipline for recognising wholes by citing Peter Senge's well-known book, "The Fifth Discipline" (1990), which highlights systems thinking as a discipline. "It is a framework for seeing interrelationships as opposed to items, as well as patterns of change as opposed to static." (Senge 1990: 68).

3.4 SYSTEMS THEORY

The foundation of systems theory is a system that involves the interdependence and connectivity of sub-systems or components required to achieve a specific goal or target. It could be predicated on the idea that a specific organization's 'closeness' or synergy between sub-systems has an impact. "An analysis of a system is an analysis of parts that interact with each other for some purpose or reason" (Hodge and Anthony 1979: 49).

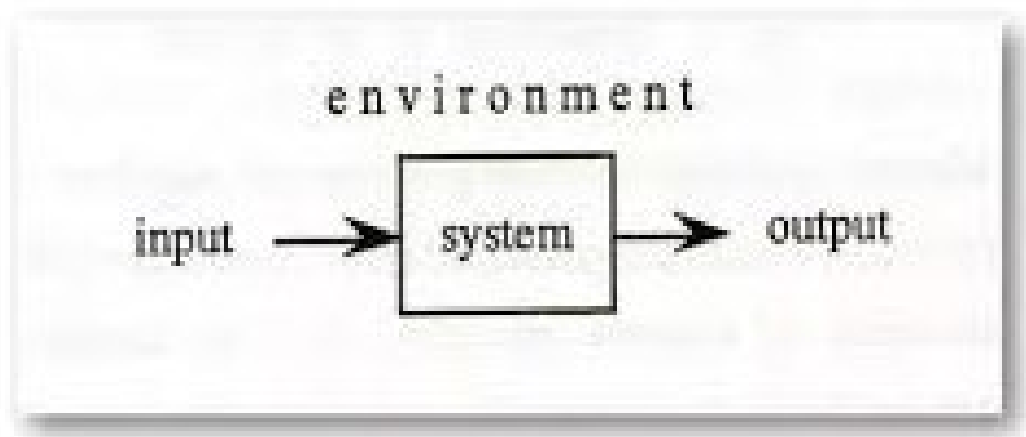


Figure 3.3: A system and its environment

Source: Sadowski (1999: 20)

Figure 3.3, depicted in Sadowski (1999), shows a system and its surrounding environment. This figure illustrates a simplified approach of system input and output. According to Shall, when conducting system analysis, the component is never evaluated in isolation from the larger system (1999). In addition, the results of Shall's research indicate "the integrated components that make up the system of performance budgeting include financial planning, expenditure management, and performance management" (Shall 1999).

Based on findings by Capra (1982: 288, cited in Siswana 2007) systems thinking is "process thinking, associated with processes, interrelation with interaction, and opposites unified through oscillation". Nonetheless, "Capra's argument could merely be based on interrelation and interaction with the process within a system being crucial to create a culture of co-operation, in order to respond positively to an environment in which an organisation, including managerial leadership, is exposed" (Siswana 2007).

Additionally, insufficient systems theory analysis can prevent leadership from keeping track of the growth of the PFM system in the public sector. This failure is represented in poor coordination, uncoordinated activity without synergy, and a failure to "listen" to the environment. Environmental analysis in public administration depends on cooperation between a system and a sub-system, as well as the use of systems theory within an organisation. The benefits and drawbacks of systems theory provide indisputable evidence for this claim, which is provable. If systems theory is ever going to go from the domain of theory to the realm of reality, it is critical for public officials in general and for administrative administrators in particular, to possess the requisite technical capabilities. This will guarantee the business runs effectively, especially now the PFM system is in place (Siswana 2007).

Molineux (2018) defines systems practice as a set of practices utilised in organizational transformation efforts, which are covered in this section. Systemic thinking, defined by Espejo (1994: 210) as "a grasp of how pieces relate to each other and form big holes, that is, of self-organizing systems," is required for systems activities. Flood (2010) describes how systemic thinking can help people obtain significant insights regarding events, behaviour, and structure. The complexity of an organization's environmental setting, business strategy, culture, and operations, as well as their interactions, can only be fully comprehended through systemic thinking, in my opinion. This perspective is supported by the SAR concept (Burns 2007).

3.5 UNSTRUCTURED PROBLEMS

Unstructured difficulties are characterised by varied individuals, multiple opinions, competing interests, and crucial intangibles, in addition to key uncertainties, as defined by Setianto (2014). Methods for problem-solving have to fulfil a number of requirements before they can be considered effective. These include being able to articulate multiple perspectives and the relationships between them; being easy and simple enough to permit participation from all actors; having an iterative nature; and being able to adjust the problem representation to reflect the current state and stage of discussion among the actors. Among these requirements, one of the most important is the ability to articulate multiple perspectives and the relationships between them (Mingers & Rosenhead 2004; Setianto 2014).

The feedback we receive provides a systematised depiction of any interrelationship patterns that may assist in "understanding the underlying patterns hiding beneath the events." In contrast to how humans typically see interactions, which are depicted as linear paths, feedbacks show interrelationships in the form of a circle, which demonstrates every influence has both a source and an effect.

Issue structuring begins with a meeting with key stakeholders to acquire their viewpoint on the problem and inspire enthusiasm for their involvement right from the start. Obtaining secondary evidence is the next step in establishing the significance of the problem that has been recognised. Following this, it is recommended that "vast pools of raw ideas" be drawn upon in group sessions (Visser 2007; Maani and Cavana 2007).

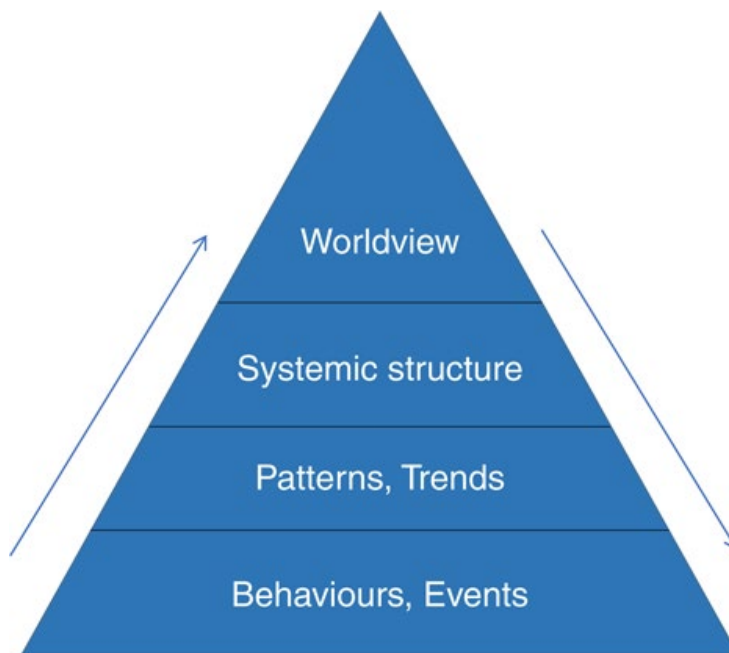


Figure 3.4: Causal pyramid

Source: Adapted from Senge (1990, cited in Molineux 2018)

The pyramid of thinking (Figure 3.4) shows the bottom two layers of the pyramid, events and patterns, are where problems are identified. Events are akin to snapshots, which are photographs of a particular point in time that may be seen readily. Moving from event-level thinking to deeper pattern-level knowledge is a requirement of systems thinking. Patterns are long-term trends or shifts in events (Molineux 2018).

The first step in implementing a system change is to create a map of the current system(s). To fully grasp the implications of the proposed modification,

it is vital to have a thorough understanding of the underlying systems. It will be possible to discover crucial leverage points and potential blockages by mapping the system(s). System owners and stakeholders can benefit greatly from using diagrams to portray reality as they experience it (Lane 2000). This mapping process can be completed and put to good use by utilising innovative thinking and design methodologies, as well as including key stakeholders and groups in the research process. People tend to understand the system and its difficulties only superficially, where learning about it is concerned. It is recommended by Senge (1990) to begin by identifying the underlying causes of the problem. Understanding impacts and crucial leverage points can be aided by using the causal loop diagram (CLD) (Lane 2008). Figure 3.5 depicts a basic CLD for population, as illustration.

3.6 STRUCTURING THE PROBLEM USING CLD AND FEEDBACK LOOPS

One of the pillars of SD (Sterman 2000) is feedback, which describes how behaviours can reinforce or balance one another, as well as helping us learn to notice recurring structures (Senge 1990). It is a crucial starting point for systems thinking, since reality is made up of circles and "the key to perceiving reality systematically is seeing circles of impact rather than straight lines" (Senge 1990). In contrast to how we typically see interrelationships in straight lines, feedbacks portray interrelationships in a circle, demonstrating that every influence is both cause and consequence. Feedback provides a systematic representation of any interrelationship patterns that might help us "understand the deeper patterns hiding beneath the events."

A feedback loop is made up of variables and the causal connections that connect them (Schaffernicht 2006). An arrow shows the cause-and-effect connection between two variables. Each of these causal relationships' polarity shows how the variables are interconnected and can move either in the same or in the opposite direction (Sterman 2000; Schaffernicht 2006). According to Maani and Cavana (2002, 2007), "s" stands for the same direction and "o" for

the opposite way. For a causal link that travels in the same direction, Morecroft (2008) and Sterman (2000) use a positive sign (+) close to the head of the arrow; for a causal link that travels in the opposite direction, they use a negative sign (-).

Reinforcing feedback loops and balanced feedback loops are two different types of feedback processes. Positive feedback loops are self-reinforcing and signal rising or decreasing actions in the system, whereas negative feedback loops are a self-correcting mechanism that resist and counteract change. Positive feedback loops show rising or declining system behaviour (Senge 1990; Senge *et al.* 1994; Sterman 2000; Maani & Cavana 2007).

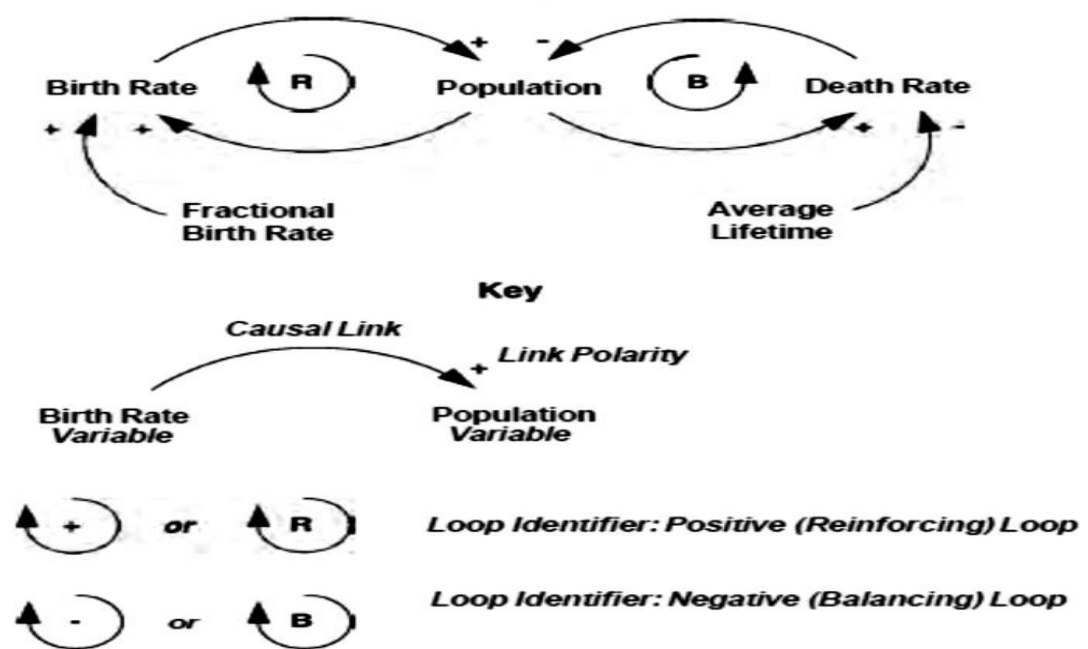


Figure 3.5: Example of CLD

Source: Sterman (2000: 138)

Figure 3.5 provides a representation of a CLD for reference. This specific CLD has two loop identifiers, one labelled "reinforcing" (denoted by "R"), and the other labelled "balancing" (denoted by "B"). The reiterative cycle of circulation

that reinforces itself, which links the birth rate to the population, operates as intended.

For instance, a rise in the birth rate will result in a proportionate growth in the population, and the opposite is also true. A rise in the birth rate will be accompanied by an increase in the population (same directions). The balancing loop, on the other hand, moves in the opposite direction of the other loops and connects the death rate to the overall population.

Leverage is defined as “decisions and actions for change and intervention which have the highest likelihood of lasting and sustainable outcomes” (Maani 2016: 128). The loop structures of each of the archetypes provided are shown in the archetypes. The archetypes' basic reinforcing and/or balancing loop patterns provide a starting point for recognizing those dynamics in our own organizations. Rather than viewing each event as a discrete individual occurrence, this graphic might assist in detecting broader structural tendencies at work (Kim and Lennon 1997).

3.7 FIVE APPROACHES OF SYSTEMS THINKING

In this section of the study a short synopsis of the five approaches to systems thinking, as described and discussed by Roland and Holmel (2010) and many other researchers in the field, is provided. The method employed in this study, however, is a combination of SSM, SD, and CSH; all of which are discussed in greater detail in Chapter 4 of this research, along with their applications. The learning interventions for both the researcher and the stakeholders for this particular study are also detailed. Many scholars in various areas of study researched and criticised these methods, nonetheless, analyses of these strategies to support PFM as a system is limited in the public administration domain. This prompted the current research to discover more significance and relevance and test the application of a SSM, SD, and CSH combination in the field of Public Administration as a discipline.

3.7.1 Systems Dynamics (SD)

John Morecroft's analysis of SD is one of the elements included in the scope of this inquiry. In the late 1950s, Jay W. Forrester, a professor at the MIT Sloan School of Management, founded the MIT Systems Dynamics Group, which launched the SD field (Forrester 1961). In order to put what he had learned about systems into practise, Forrester then started applying what he had discovered regarding systems throughout his career as an electrical engineer to more typical sorts of systems. Internal feedback loops and temporal delays, both of which have the ability to affect how the system acts overall, are taken into account in this method for understanding the behaviour of complex systems over time. Using feedback loops, stocks, and flows to illustrate non-linearity distinguishes SD from other methods for the study of complex systems. These components are not included in other methods for studying complex systems.

In the late 1950s, Forrester began developing servo-mechanism systems to control radar. After that, he went on to the areas of first, modelling global resource depletion and then, industrial relations, both of which required Forrester to be heavily active (Forrester 1971). It was important to model "global systems" in order to achieve sustainable development, and a prominent organisation by the name of the Club of Rome significantly aided the modelling effort (Meadows *et al.* 1972, 1992). The 'Fifth Discipline' technique, which Peter Senge popularised in his best-selling book of the same name, was founded on SD in the years that followed (1990).

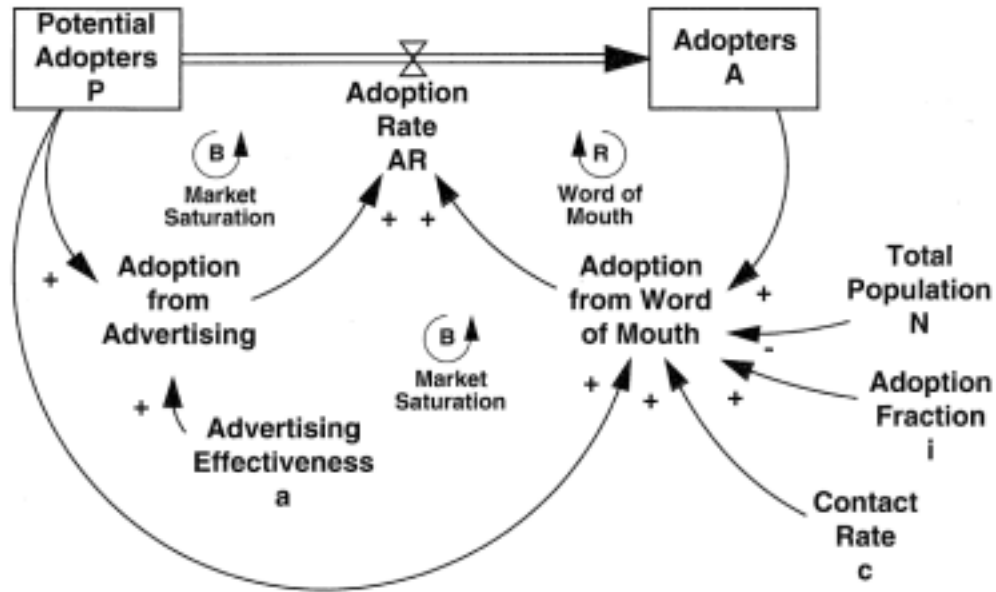


Figure 3.6: Systems Dynamics (SD)

Source: John Forrest (2007, in Sterman and Rahmandad 2013)

For this study, SD will represent patterns of behaviour by re-enforcing a model that demonstrates different behaviours of the PFM system. SD crafts how to develop models combining stock flow systems to create models. Systems thinking and SD are tools to elicit and articulate mental models and influence social and organisational structure, in addition to enhancing mental models by explicitly considering feedback (Sterman 2014). An illustration of these models is provided (Figure 3.6), while the creation of systems archetypes in order to create a structural pattern for the purpose of this research, is further explained in Chapter 3A.

3.7.2 Viable Systems Model (VSM)

A viable system is one able to sustain its own existence. Beer (2000) offered the VSM (Figure 3.7) as a model for the required and acceptable parameters for system viability. To be able to accomplish this, it needs to be organised in a way that allows it to meet the challenges of surviving in an always shifting

environment. One of the most significant qualities of systems able to persist throughout time, is their ability to adapt.

A cybernetician named Stafford developed the idea and published it in a number of papers, some of which include “Brain of the Firm” (Beer 1972) and “Heart of Enterprise” (Beer 1979) for theory, and “Diagnosing the System” (Beer 1985) for application methods. The ideas proposed by Beer are an amalgamation of Eastern and Western schools of thought. When he was younger, Beer lived in India for a while, with his early excursions to India and subsequent interest in Eastern concepts, in particular Indian cultural traditions, essential in establishment of the VSM. Beer was also a founding member of the VSM. Beer’s own experience with practical application of a VSM occurred in Chile in the early 1970s, when he was invited by Allende to do so. This was before the military upheaval that took place in Chile at that time.

Beer essentially invented management cybernetics, which is today known as Organizational Cybernetics, and it is developed and applied extensively by cyberneticists all over the world. VSM, such as SD and the other techniques in this collection, has been and continues to be shaped for a number of diverse contexts, including those with dissimilar aims. VSM has been used in a number of situations, from increasing productivity in small businesses and communities, to having a significant impact on national and local environmental policy (Espinosa *et al.* 2008).

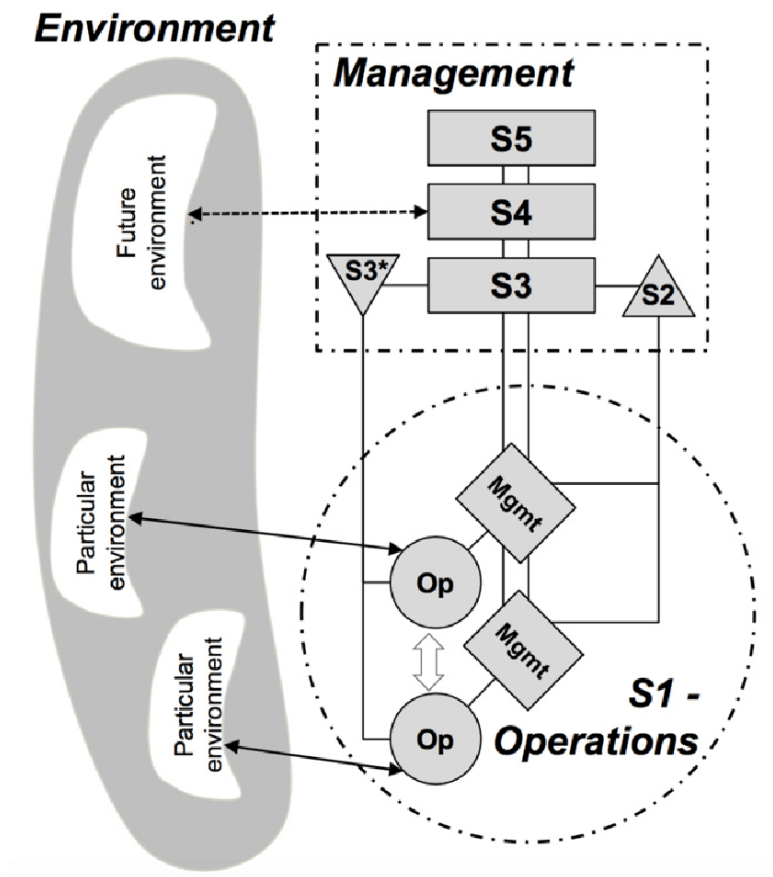


Figure 3.7: Viable Systems Model (VSM)

Source: Adapted from Beer (1972), revised by Rios (2010)

The VSM's remarkable generality is one of its advantages; nevertheless, because of this generality, it lacks precise ways for implementing its instructions. The environment, for example, should be monitored and a model of the environment produced by the system, according to the VSM (Ali Azadeh 2014). All of Beer's results are embodied in his well-known VSM, which dominates the organic viewpoint on the approach of organizational cybernetics.

The model in Figure 3.7 depicts the qualities of a system that can remain viable, as its name implies. Viable, according to Beer, means “able to maintain a separate existence” (Beer 1972). VSM's popularity among management, consulting, systems analysis, and design firms is growing due to its capacity

to deal with complicated and non-deterministic situations, uncertainty, and a competitive environment, as well as its provision of a comprehensive organizational knowledge (Schwaninger 2006).

3.7.3 Strategic Options Development and Analysis (SODA)

Eden and Ackerman (2010a) wrote: “Strategic Options Development and Analysis (SODA, using Cognitive Mapping). People employ mental models, or belief systems (mind maps, cognitive models), to perceive, contextualize, simplify, and make sense of otherwise complex circumstances” (Figure 3.8).

In the 1970s, SODA grew out of Colin Eden’s interest in Kelly’s psychological work on ‘personal construct theory’ (Kelly 1955). The concept of cognitive mapping is centred on the production of meaning in order to assist discussion and the development of some agreed-upon action plans (Eden and Ackermann 2010a). While useful for clarifying thoughts on a specific issue at the human level, work on SODA spans far broader settings of strategic thinking, as succinctly represented by the software term JOURNEY making (Jointly Understanding Reflecting and Negotiating strategy).

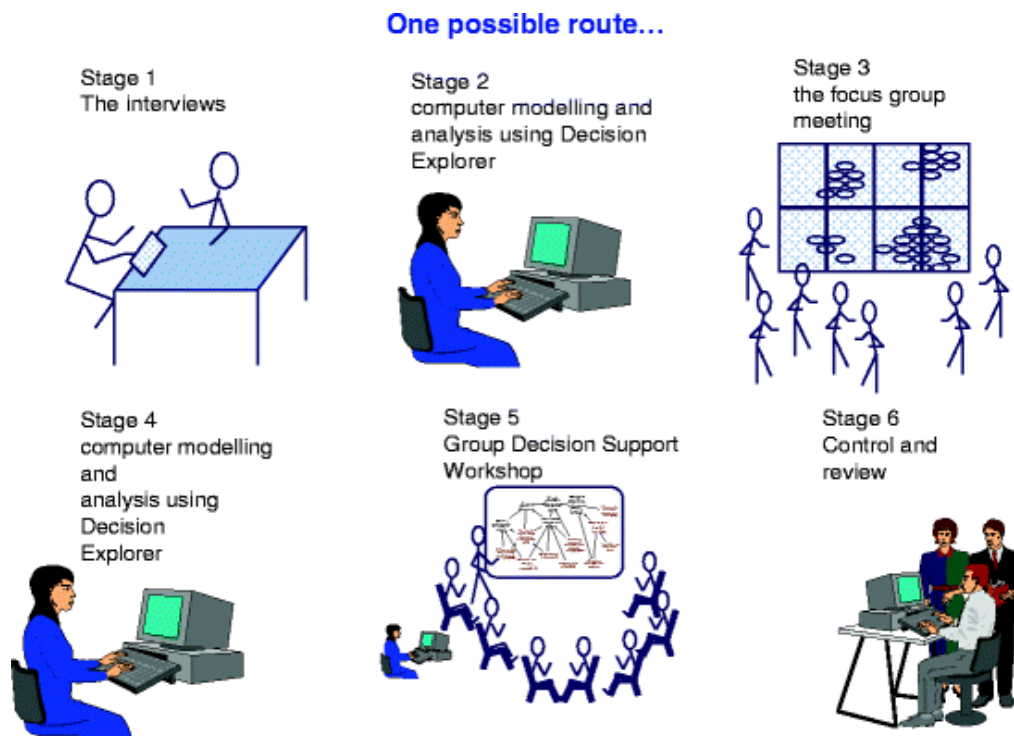


Figure 3.8: Strategic Options Development and Analysis (SODA) with Cognitive Mapping

Source: Adopted from Eden and Ackermann (2010a)

Figure 3.8 shows the SODA, which is a way for facilitating organisational transformation by paying deliberate attention to and appreciating the contributions of individuals' points of view. As a result, consulting practise places an emphasis, in addition to more traditional knowledge management abilities, on the necessity of possessing facilitation skills (process) (content). The strategies for improvement can be developed using these techniques, which are based on three levels of hierarchical systems: (a) goals (also referred to as ideal planning), (b) strategic orientations (also referred to as objective planning), and (c) prospective options (also referred to as operational planning) (Eden and Ackerman 2010b).

“Making Strategy: A Journey of Strategic Management” and “The Practice of Making Strategy: A Step-by-Step Guide” are two key sources of publications at SODA. “The Practice of Making Strategy: A Step-by-Step Guide” was

published in 2014, adding to “The Process of Developing Strategy as an Example of Strategic Management” (Eden and Ackermann 2010b). The findings provided in these research studies indicated the context of application spans a wide variety of settings. These settings vary from the decision-making processes of people, to those of both small and large organisations. In addition to this, it has been proposed for the management of inter-organizational connections on a larger and more international scale (Robinson *et al.* 2000: Castano *et al.* 2017).

3.7.4 Soft Systems Methodology (SSM)

Peter Checkland and John Poulter developed the SSM approach as a way to model the processes carried out within an organisation. Checkland and Haynes (2019) and their colleagues came up with the idea while working on an action research study that lasted for 20 years. The study of complex situations in which there are varying perspectives on how the issue should be characterised (also known as "soft problems"), is where SSM shines brightest. Some examples of this kind of study include figuring out how to improve the delivery of medical care, how to better prepare for natural disasters, and so on. When should inmates who are suffering from mental illness be allowed to leave prison? What steps should be taken to address the issue of homeless youth? In such circumstances, it may be difficult to reach a consensus on even the true nature of the issue that has to be treated.

The soft systems method uses the idea of a "system" to function under these circumstances. "Systems Thinking, Systems Practice" (Checkland 1981), "SSM in Action" (Checkland and Scholes 1990), and "Information, Systems, and Information Systems" are the three main texts on SSM (Checkland and Holwell 1998).

"Learning for Action" (Checkland and Poulter 2006) is the most recent book, and provides the original material for this compilation.

“It can be used by an individual to manage, for example, personal recovery from substance abuse; It can be used by an NGO volunteer to engage local people in mine clearance after a war in the Middle East; It can be used by members of a women's forum in Japan to make sense of the impacts of societal changes on their lives”.

These are merely a few of the applications SSM enable; there have been many other successful studies in SSM, and it is believed to have given some positive results. SSM is a strategy of coping with perceived problematic (social) situations that is both organised and action-oriented, and it organises thoughts about such problems in order to take action to alter them (Holwell and Reynolds 2010).

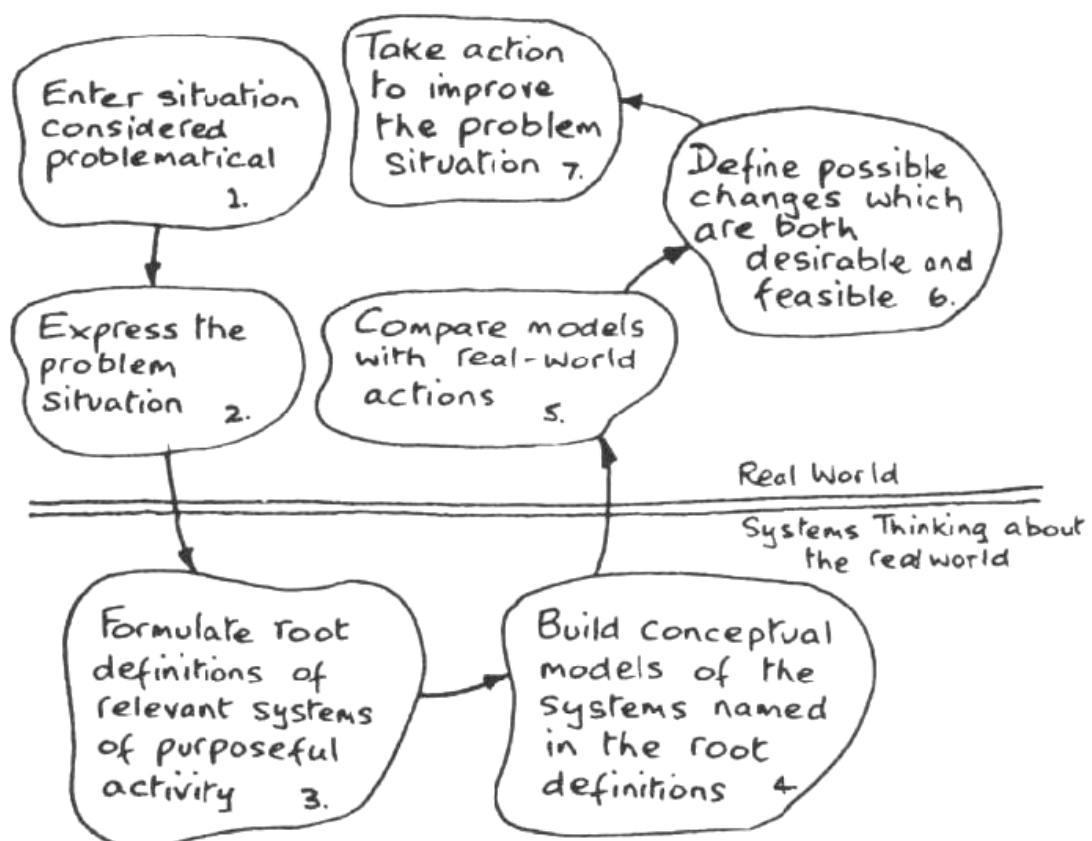


Figure 3.9: Application of Soft Systems Methodology in Systems thinking

Source: Checkland (1981)

The chronological sequence and content of the methodology are illustrated (Figure 3.9) and is to be read from 1-7. This is a logical sequence suitable to describing it but does not have to be followed in using the methodology.

“The methodology contains two kinds of activities. Stages 1, 2, 5, 6, and 7 are what is referred to as ‘real-world’ activities, necessarily involving people in the problem situation. Stages 3, 4, 4a, and 4b are systems thinking activities and may or may not involve the activities in the problem situation. Generally, the language of the real-world part is the normal language of the problem situation, while in the systems thinking part, it is the language of systems. It is in the systems thinking part that real-world complexity is understood as a result of translation of the real-world into the higher-level language of systems”
(Checkland 1981: 162-164).

SSM was used to identify the initial situation that was considered problematic and develop some purposeful activity models deemed relevant to the situation for addressing similar problems identified in this research. This was done to understand the real-world complexity associated with this study.

3.7.5 Critical Systems Heuristics (CSH)

Werner Ulrich and Martin Reynolds (2002) developed the CSH framework for reflective practise, founded on practical philosophy and systems thinking. The name alludes to three primary concerns in its construction. The first and most important objective is to raise the level of 'critical' (reflective) competence across the board, not just among professionals and those in positions of authority. Second, in order to engage in reflective practise, one cannot rely exclusively on theoretical approaches; rather, one needs 'heuristic' aid, which can be in the form of questions and other instruments of reasoning that can be utilised in actual situations. Third, with regard to gaining an understanding of the methodological requirements of a reflective practice approach, "systems" thinking might be a good place to get started (Ulrich 2002).

Werner Ulrich was the creator of systems thinking and practical philosophy. The CSH framework for reflective practise is the first organised effort to give critical systems thinking both a theoretical underpinning and a usable methodology. It is based on Werner Ulrich's practical philosophy and systems thinking. The fundamental idea behind CSH is to provide critical support for boundary critique, which can be understood as an organised effort to address border judgments. Boundary judgments determine which empirical findings and value considerations are deemed significant, while those that are not, are either disregarded or regarded as having less significance.

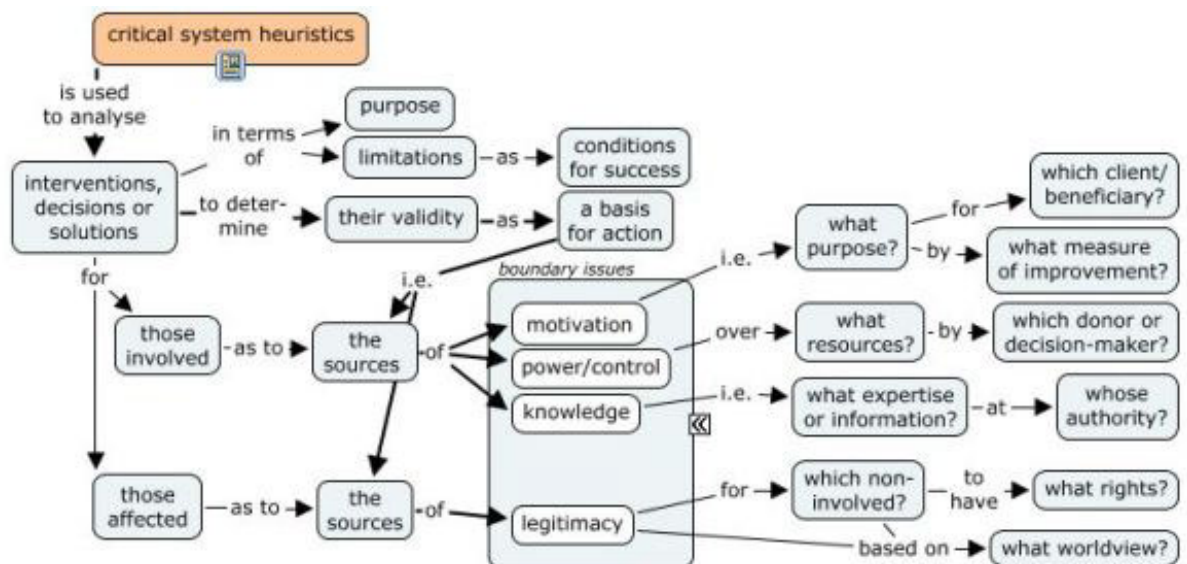


Figure 3.10: Critical systems heuristics (CSH)

Source: Adopted from Ulrich (2002)

Heuristic processes, in contrast to derivative (algorithmic) procedures, which help to address logically and mathematically defined issues, are used to discover and investigate (Figure 3.10) key problem elements, assumptions, queries, or solution strategies in professional practise. Heuristics literally translates to "the art (or practise) of finding"; the Greek verb 'heurisk-ein' means "to find" or "to discover." Since professional activity typically starts with

"soft" (ill-defined and qualitative) difficulties, heuristics are crucial (Ulrich 2002).

As there is no single appropriate way to decide such issues, a critical approach is required; solutions will be based on personal interests and viewpoints, values, and more (Figure 3.10). Contrarily, a critical approach can help people think and discuss alternative ideas without necessarily producing uniquely valid answers. Good professional conduct is, thus, crucial. With all problem definitions, solution ideas, outcome assessments, and so on, based on prior judgments about the "whole system" under study, systems thinking is important. Improvement, for example, is an obviously systemic idea, as sub-optimisation will occur when not defined with reference to the "whole system" relevance. These underlying judgments are referred to by CSH as 'boundary judgments' (Ulrich 2002).

The main goal of CSH is to promote boundary critique, which is a methodical method for analysing border judgments. Boundary critique comes in two main varieties. It can either use boundary judgments against people who might not be able to manage these themselves (emancipatory practise) or try to manage boundary judgements on a self-critical level (reflective practise) (Reynolds 2007).

Sterman (2000) implies that "Fifth Discipline" was inspired by the field of simulation dynamics (SD), but there are no formal simulation models or equations in it. It all began with Forrester's seminal book "Industrial Dynamics," published in 1961, and further developed in the many ways described in the field's 50th anniversary review. Additionally, SD can be effectively situated within the intellectual traditions that have contributed to the development of feedback notion (Richardson 1991, cited in Reynolds 2007).

Three of the systems techniques described above were used in this study to strengthen the questions relevant to it. SSM's rich-picture technique provides

a more accurate representation of the actual situation, allowing numerous connections to be displayed simultaneously. As a result, it aids in the researcher's acquisition of more knowledge about the issue (Checkland and Poulter 2006; Ngai *et al.* 2011). The main strategy used in this study to build an accurate model of the PFM system was system dynamics. The PFM system's stakeholders and people impacted by it required a combination of SD and SSM, with SD used to construct the problem structure and SSM and 12 boundary questions of CSH expressing the perspectives of the beneficiaries who were less powerful.

3.8 CONCLUSION

The goal of this study was to examine current PFM leadership and inefficiencies, as well as the PFM's dynamic existence and the effects it has on service delivery. In this chapter, among other matters, reasons were presented to support the implementation of systems thinking in the PFM system in the chosen municipalities. The three techniques selected for this study namely, SSM, SD, and CSH were also discussed and summarised. Furthermore, it has been proposed, according to the conventional way of thinking about systems, all complexity effects can be formed as a result of specific configurations of positive feedback loops and interaction networks among enormous collections of relatively simple units. Therefore, the goal of this study was to explore systems thinking as a more all-encompassing approach to issue solving. Systems thinking is a method that focuses on the interactions between the many parts of a system, as well as how those systems function through time, and in relation to other, bigger systems.

Given the researcher's extensive awareness of systems thinking presented in this chapter, subsequent to this is a sub-chapter, which presents and explores the various systems archetypes used. The chapter outlines the archetype found to be most appropriate in dealing with PFM inefficiencies and leadership.

SUB-CHAPTER 3(A)

SYSTEMS ARCHETYPES AND SYSTEMS DYNAMICS

3A.1 INTRODUCTION

This sub-chapter explores the various systems archetypes employed by many researchers, providing an outline of the archetype deemed most appropriate to deal with leadership and PFM competences. As the researcher is extensively aware of systems thinking (as presented in Chapter 3), this step is considered necessary to respond to the complex nature of Public Administration. The study recognises the complexity of problems associated with leadership complexities for improving financial management in the public sector, however, the researcher believes numerous issues exist that require people to participate in the discussion, particularly the chosen participants of this research, namely the Chief Directors of KZN at the COGTA.

Given this background, the study emphasises the systems archetype for presenting a complex system or scenario, in order to better understand its bounds. According to Richmond (2001), the world has many challenges, with several approaching crisis proportions. Whether we name it systems thinking or SD, the SD community has something very significant to contribute to solving these problems. As a result, a four-dimensional depiction of financial management practitioners' problem situation was created. These dimensions include motivational power, controllable power, knowledge power, and legitimacy power. With the help of archetypes, a CLD was created.

3A.2 SYSTEMS ARCHETYPES

Kim and Anderson (2011: 2) describe a systems archetype as “a recurring, generic character, symbol, or storyline”. In systems thinking, the term has a very similar meaning. It refers to “recurring, generic systemic structures found in many kinds of organisations, under many circumstances, and at different

levels or scales, from internal personal dynamics to global international relations” (Kim and Anderson 2011: 4).

As a group, the system archetypes form among different categories of system thinking tools (Figure 3.5, Chapter 3). Each archetype is characterised by a storyline with a particular theme, a specific pattern of behaviour over time that can be represented graphically, and a unique systemic structure that can be represented in a CLD. Kim and Anderson (2011) highlight the value of archetypes is they can be studied independently of a particular storyline, problem, or organisational situation, thus allowing general, transferable lessons to be drawn, applicable to many situations in our own lives.

While Braun (2002: 32) explains common patterns of behaviour in organisations are described by systems archetypes, these are also used as diagnostic tools to “provide insight into the underlying structure from which behaviour and discrete events emerge over time”. Furthermore, this supports that “systems archetypes are highly effective tools for gaining insight into patterns of behaviour, themselves reflective of the underlying structure of the system being studied”. Braun (2002) clarifies the archetype application is done in two ways, diagnostically and prospectively Diagnostically, managers use archetypes to recognise behaviour patterns already present in their organisation, with these serving as the means to gain insight into emerging archetypal behaviour from the underlying systems structure (Braun 2002).

De Steenhuijsen-Piters *et al.* (2018) report a systems archetype represents generic behaviour patterns or SD in any system, with the concept of archetypes mostly applied in the context of business management and organisational life. The term archetype was first coined by Peter Senge (1990) in his book “The Fifth Discipline”, wherein the author uses systems thinking to convert companies into learning organisations, with understanding complexity and reflective conversation some of the key competencies required to address complex problems. For the purpose of this research, archetypes of systems

behaviour can be found in PFM, where a system is compounded with complexities to deal with service delivery.

Archetypes are becoming more popular as a way for deciphering recurring patterns of variables and processes that affect the long-term viability of socio-ecological systems over time (Jager *et al.* 2017; Levers *et al.* 2018). This method allows for contextually explicit generalisations of case study findings. The generic structures and behaviours of systems are described by archetypes (Senge and Sterman 1992; Wolstenholme 2003, 2004). Archetypes have a long history, dating back to philosophies of Plato and Locke, where archetypes were viewed as original forms of complicated and real objects (Oberlack *et al.* 2019). Jung (1959, cited in Oberlack *et al.* 2019) defined psychological archetypes as “patterns and symbols of the collective unconscious that manifest themselves in dreams and the human imagination”.

"Tragedy of the Commons" and "Limits to growth" are two examples of archetypes often depicted as casual graphs (Braun 2002; Lane 2008). A wide range of sustainability study subjects are examined using archetypes, including land systems, governance and institutional change, socio-ecological systems, as well as global change (Eisenack *et al.* 2019).

3A.3 RECENT DEVELOPMENTS AND FINDINGS ON THE USE OF ARCHETYPES

Archetypes are recurring patterns that hold across cases of the topic of interest, according to Eisenack (2012, in Oberlack *et al.* 2019). This indicates an archetype appears in more than one case. Consequently, the authors recommended avoiding the use of archetype analysis as a method of research for a single case study. Some of the more prevalent techniques include meta-analyses of case studies (Messerli *et al.* 2016; Oberlack *et al.* 2019), SD modelling (Banson *et al.* 2016), and participatory scenario construction (Wardropper *et al.* 2016).

The most significant distinction was found to lie in whether the archetype is identified at the building blocks level (for example, incidental mechanisms) or at the level of the cases (Oberlack *et al.* 2019). The "building blocks technique" is used to recognise archetypes in such a way that any single instance of the phenomenon of interest may be characterised by either a single archetype or a combination of archetypes (Eisenack 2012). Each scenario is differentiated from the others by illustrating the archetypes present and how they reveal themselves in that particular case. In their model-centred meta-analysis of case studies, Oberlack *et al.* (2019) found archetypical processes that explain how large-scale land purchases affect rural livelihoods. These processes were found causally related to large-scale land purchase effects.

When conducting research on a large number of instances, archetypes are sometimes used as an analytical tool to assist the researcher to spot trends. This use almost always builds on previously collected empirical data. Although archetypes are discovered through inductive reasoning, theory remains an essential component, because it guides the choice of indicators for statistical examinations (Cullum *et al.* 2016; Kok *et al.* 2016).

The Jungian view of archetypes arises from the perspective of psychology and is strongly influenced by the teachings of Sigmund Freud, Jung's mentor. For Jung, personality archetypes were represented by a cast of character types he believed were neither learned nor taught, but inherent in our unconscious mind. Jung's writings, particularly "The Archetypes and the Collective Unconscious" (1959), established a system of four rules that could be used to identify an archetypical image or character type. These were further refined by Hobson (1961) and Samuels (2008), and are paraphrased as follows:

- 1) The imagery must be specific; it must occur regularly in different people, as well as recurring in the experience of a single individual.
- 2) The imagery must appear in different cultures and at different times.

- 3) The imagery must have a similar meaning whenever and wherever it occurs.
- 4) The imagery must NOT have been acquired through education, tradition, religious teachings or acculturalisation.

The justification for archetype analysis in sustainable research was presented by Oberlack *et al.* (2019). Their motivations revolve around cumulative learning from case studies, confronting ideographic traps, and research fragmentation. The most common reason for conducting archetype analysis is to accumulate learning through various learning scenarios and contexts. Despite this, the relationship between socio-ecological systems is complicated, multifaceted, and contextual (Folke *et al.* 2005). Accordingly, Beach and Pedersen (2016) concur researchers frequently use the design of case study research, which offers an in-depth knowledge of interaction outcomes and casual impacts at a high degree of contextual information.

For example, Banson *et al.* (2016) used established systems archetypes as a diagnostic tool to anticipate potential problems in Ghana's agricultural sector. These archetypes included limit to growth, shifting the burden, success to the successful, and escalation, as well as accidental adversaries and tragedy of the commons. All these archetypes contributed to the researchers' ability to make accurate predictions. These unofficial diagrams of the archetypes were put to use in order to locate potential leverage areas for sustainability initiatives (Oberlack *et al.* 2019). According to the definition of "diagnostic", researchers have used archetypes not only as outcomes but also as starting points for new studies.

In a recently published empirical study, familiarity with archetypes gleaned from earlier work served as a diagnostics tool. This enabled researchers to identify the problematic system and avoid issues caused by missing characteristics (Banson *et al.* 2016) more accurately. According to Oberlack *et al.* (2019), land system archetypes were recently used in a large German

research programme on sustainable land management. This demonstrated that archetypes can help fill knowledge gaps in countries with limited primary research, by extrapolating knowledge from researched contexts to similar settings where primary data collection is not possible. In other words, archetypes can help fill knowledge gaps in countries where there is a lack of primary research.

Additional findings indicated bridging the gap between global narratives and local realities and dealing with problems of over-generalisation, as well as local (place-based) and global sustainability insight have been developed in parallel, however, there is clear need for their integration (Rindfuss *et al.* 2004; Balvanera *et al.* 2017). One Global narratives are another barrier to integration, with discourse on, for example, food security, land grabbing, or climate adoption, which may not include the critical heterogeneity of local actualities, instead creating overgeneralised explanations of considered phenomenon.

There is a contrast between the ambition and needs in policy and scientific communities to generate global narratives and the common understanding that every case is unique and context matters (van Vliet *et al.* 2016). By contextualising their characteristic aspects and developing refined narratives, explicit with reference to the varied contextual settings, Oberlack *et al.* (2019) find archetype analysis not only offers general conclusions, it also bridges the gap between local reality and global narratives.

Oberlack *et al.* (2019) conclude the potential of archetype analysis to foster discourse and cross-fertilisation across a wide variety of techniques, disciplines, epistemologies, and ideas. This situation arises when archetypes are used by researchers as boundary objects they design, test, evaluate, and modify during the course of their work. In the process of scenario development, it is occasionally useful to apply well-established knowledge, with regard to archetypes, in a prospective manner. For example, Turner *et al.* (2017) used Senge's (1990) casual diagrams of the "success-to-be-successful" and "Fixes-

that-backfire" system archetypes to inform the formulation and evaluation of policy scenarios, in their study related to dealing with agriculture and transformation in the north central US. Further to this, using the four archetypes presented by the "Great Transition Initiative," Kubiszewski *et al.* (2016) conducted an analysis to determine the value of ecosystem services across the Pacific and Asia.

3A.3.1 Basics

In their book "Systems Archetypes Basics, from story to structure", Kim and Anderson (2011) provided an outline of the eight archetypes. These will be discussed in brief in this section, in addition to indicating the adoption of suitable archetypes for the basis of this research.

The eight archetypes outlined by Kim and Anderson (2011) are:

- "Fixes That Fail"
- "Shifting the Burden"
- "Limit to Success"
- "Drafting Goals"
- "Growth and Underinvestment"
- "Success to the Successful"
- "Escalation"
- "Tragedy of the Commons"

Kim and Anderson (2011) make mention of a significant published list of system archetypes, which enables detecting the inter-relationships among these and to construct comparisons and contracts using this information. The first three archetypes described by the authors are those that are, in general, the easiest to recognise. The first archetype further investigated is "Fixes That Fail," chosen because it involves an activity carried out on a regular basis,

namely problem-solving. The following section will examine this archetype in greater detail.

The second archetype, "Shifting the Burden", shows best management of a problem symptom by applying a symptomatic treatment or a more fundamental solution. The problem symptom is decreased or eliminated through execution of a symptomatic remedy, which means there is less need for a more basic solution. This archetype can assist in discovering multiple solutions to problems, with improved comprehension of the system in which they occur.

The third archetype covered is referred to as "Limits to Success." This archetype is pertinent as many businesses tend to be obsessed with development merely to expand, frequently without concern for potential limits. This archetype can assist researchers in dealing with development pressures in a more realistic manner, assisting the study to select inevitable boundaries, anticipate those limits, and prepare for them.

There is also a predetermined order to the occurrence of the remaining archetypes. Some are connected to one or more of the first three, in the sense of being additional elaborations or developments of those ideas. A good example of this is the combination of "Limit to Success" and "Drifting Goals," known as "Growth and Underinvestment." Other archetypes, such as "The Tragedy of the Commons" and "Escalation," are more likely to be applicable at the level of a group or organisation than at the intra- or inter-personal level (Kim and Anderson 2011). The preceding part provided a description of archetypes as explained by Kim and Anderson (2011), identifying the archetype best appropriate to deal with concerns raised by this research. The "Fixes That Fail" section is the first discussed.

3A.3.2 Fixes That Fail

The archetypal structures of "Fixes That Fail" each have a two-part dynamic that can clearly be seen. To begin, the issue demands a remedy be found,

because something either is not functioning as it should or it is out of control. This first dynamic can be pictured as a balanced loop that includes the problem symptom and a quick solution to the problem (Figure 3A.1, loop B1). This balancing loop illustrates the methodology fundamental to how we approach solving difficulties. The second portion of the dynamic typically starts behind the scenes, gradually becoming more apparent. This portion of the narrative is depicted in the picture as loop R2, and is the process of reinforcing brought on by the unexpected result the fix brought about. Delay plays a key role in the "Fixes That Fail" tale (Kim and Anderson 2011).

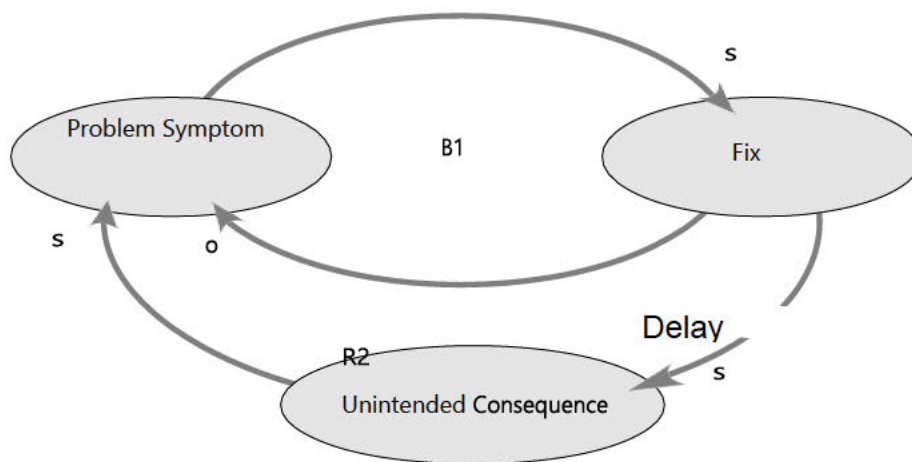


Figure 3A.1: The Structure Behind “Fixes That Fail”

Source: Kim and Anderson (2011)

In addition, Kim and Anderson (2011) state it may take much longer for anyone to uncover the unexpected consequence impact, basing this assertion on their own research. People might try a quick fix more than once before considering why the problem symptom remains in their lives. At this point, the complete hierarchical structure has been constructed, and it would be challenging to undo the completed work. Unintended effects can sometimes have irrevocable negative consequences.

Therefore, to again “walk through” the archetypal structure that “Fixes That Fail” is based on, we start with the problem symptom. When the symptom

appears, a solution is implemented that results in a diminished level of the symptom (B1). The solution, however, has an unexpected side-effect that, after some time has passed, it revives or even worsens the problem symptom (R2). How would one go about drawing a schematic of the systemic framework that underlies a “Fixes That Fail” scenario?

First, is to determine and clarify what problem symptom is to be addressed, after which the numerous options available for fixing the issue must be investigated. For instance, where the business owner assumes borrowing money is the solution to the issue of insufficient cash flow. It is important to keep in mind this first way of thinking, or hypothesis, is not entirely incorrect; the solution is effective in the short-term. Nevertheless, it is typically based on either a narrow-minded or inadequate view of the circumstance.

According to the proposal by Kim and Anderson (2011), a researcher can illustrate a theory connected to “fixing the problem” by using a balancing loop to illustrate the relationship of the problem symptom with the repair, while drawing a diagram for this portion of the structure. A researcher might also discover throughout the course of time that multiple solutions were attempted to fix the problem. In that scenario, a simple approach to express this is to depict each repair independently in its own balancing loop, by drawing a collection of nested loops. This is a straightforward way to demonstrate the concept (Figure 3A.2).

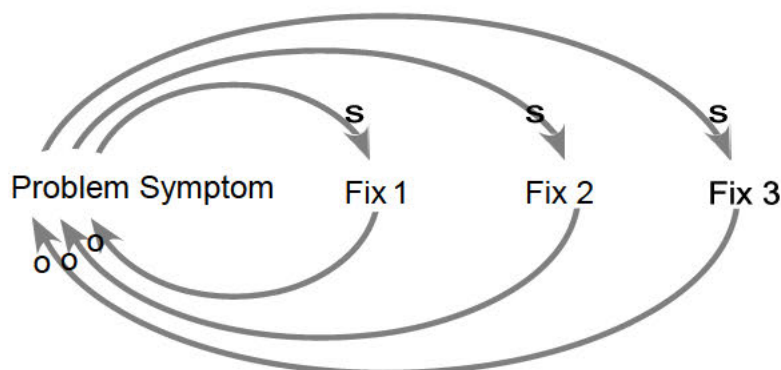


Figure 3A.2: Nested Loops

Source: Kim and Anderson (2011)

When working with loops, it is important to know what the "unintended consequences" might be. Should the solution be applied and the problem symptom is reduced or eliminated, what are the longer-term effects that ultimately impact the problem symptom? This is an essential question the use of nested loops raises to indicate a variety of possible solutions. In essence, the goal is to concentrate solely on the factors that could potentially trigger the problem symptom to recur or worsen in some way. Each time a hasty repair is implemented, it reignites the cycle of unintended consequences, resulting in the unintended effects loop cycling faster when the rapid repair loop is activated. There are more unexpected repercussions when more work, effort, and attention are poured into the quick fix cycle. To avoid "Fixes That Fail" scenarios, all the unintended repercussions of our actions need to be considered.

In order to deal with this common trend, Kim and Anderson (2011) propose questions that can be asked concerning assumptions of an issue's origin(s) and how treatments function. In addition, involving others in the learning and thinking process could also expand personal horizons.

3A.3.3 Shifting the Burden

As Kim and Anderson (2011) explain, a problem symptom can be best managed through applying a symptomatic treatment or a more fundamental solution in a "Shifting the Burden" situation. The authors state the execution of a symptomatic remedy decreases or eliminates the problem symptom; therefore, the need is reduced for a solution that is more basic. The symptom reappears over time, which prompts another round of symptomatic remedies in a vicious, "self-reinforcing loop" (Figure 3A.3). The side-effects from symptomatic therapies can redirect focus from more fundamental answers.

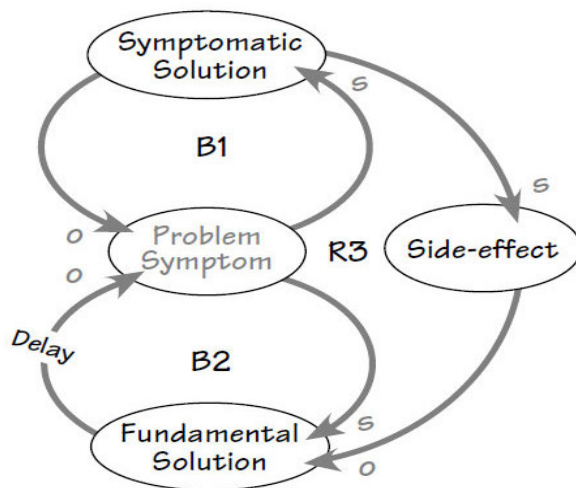


Figure 3A.3: Shifting the Burden

Source: Kim and Anderson (2011)

Typically, a "Shifting the Burden" situation starts with "problem symptoms" that inspire involvement with the goal of solving these. A symptomatic treatment is utilised to relieve the bothersome symptoms temporarily (Figure 3A.3, B1). This symptomatic remedy eliminates the need for the more difficult and time-consuming fundamental solution, by alleviating the problem symptom. Unintentionally, the symptomatic solution erodes the ability to accept a fundamental treatment. Although a fundamental solution is more time-consuming and tedious, it is more likely to uncover the root of the problem and prevent the symptom from recurring (B2). Unfortunately, due to a reinforcing process, the side-effect becomes more severe with each use of the symptomatic remedy (Kim and Anderson 2011).

As with other system archetypes, "Shifting the Burden" can aid in the discovery of multiple solutions to problems and a better knowledge of the system in which they occur. There is no one-size-fits-all solution to most of life's challenges. The aim is thus to explore the impact of the symptomatic solution's side effects on numerous prospective fundamental remedies using this template, as well as to plan several short- and long-term therapies. "Shifting the Burden" invites people to look beyond the "fast fixes" to discover how a better option can be

resisted in the process of becoming "hooked on" a habitual reaction (Kim and Anderson 2011).

3A.3.4 Limits to Success

In a scenario known as "Limits to Success," expanding actions first lead to success, which inspire even more efforts to be put forward. Nonetheless, success causes the system to reach its limits over time, which slows down the rate at which results are increasing that, in turn, creates more success. When success results in limiting action and decline of performance begins, individuals are inclined to concentrate more intensely on the first growing activities.

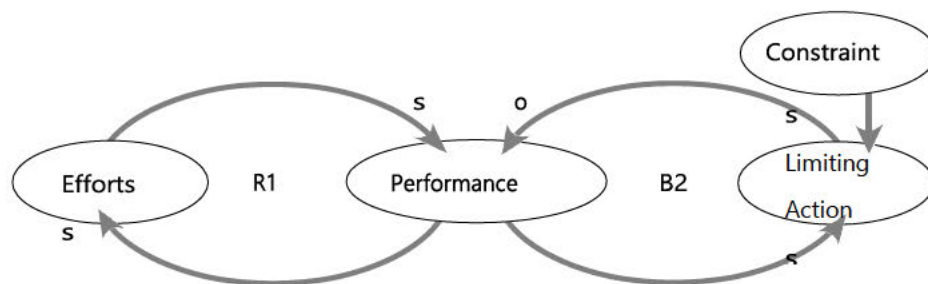


Figure 3A.4: Systemic Structure Behind “Limits to Success”

Source: Kim (2000)

The “Limits to Success” archetype structure is characterised by a reinforcing process that serves as the initial growth engine, as well as a balancing process that contains the limits that eventually cause growth to level off (Figure 3A.4).

Kim (2000) provided the following synopsis of the CLD: When efforts increase, performance improves, which drives people to put in even more effort (R1). However, performance (or development) is tied to a limiting cause or action, such that as performance rises, the forces postponing success rise along with it, because performance is related to a limiting cause or action. The performance then suffers as a direct result of the reappearance of the limiting factor (B2). The crucial aspect of this dynamic is the process of reinforcing

takes precedence over the balancing process during the growth phase. Once the balancing process takes precedence, any further prospects for development are eliminated.

A two-step method, according to Kim and Anderson (2011), should be attempted to diagram a "Limits to Success" framework and the real mechanism that functioned for a time. To uncover the limiting process, a series of questions are asked, such as: "What pressures does the growth produce in the system?" "How might those pressures cause a deterioration in performance?" "What capacity limits or bottlenecks do we see?" "How might the growth be pushing some people's mental or emotional limits?"

The situation in "Limits to Success" differs considerably from the preceding archetypes, namely, "Fixes That Fail" and "Shifting the Burden," respectively, to a much greater extent than the other systemic structures; however, these are the three most readily identifiable. When Western society lays such significant emphasis on expansion for the purpose of growth, "Limits to Success" is especially helpful as a touchstone in modern culture, because of its usefulness as a touchstone (the "bigger is better" attitude). Kim and Anderson (2011) suggest this archetype serves as a helpful reminder that limits do in fact exist, but we can learn about them, how they may emerge in our lives, and how to work with them.

3A.3.5 Drifting Goals

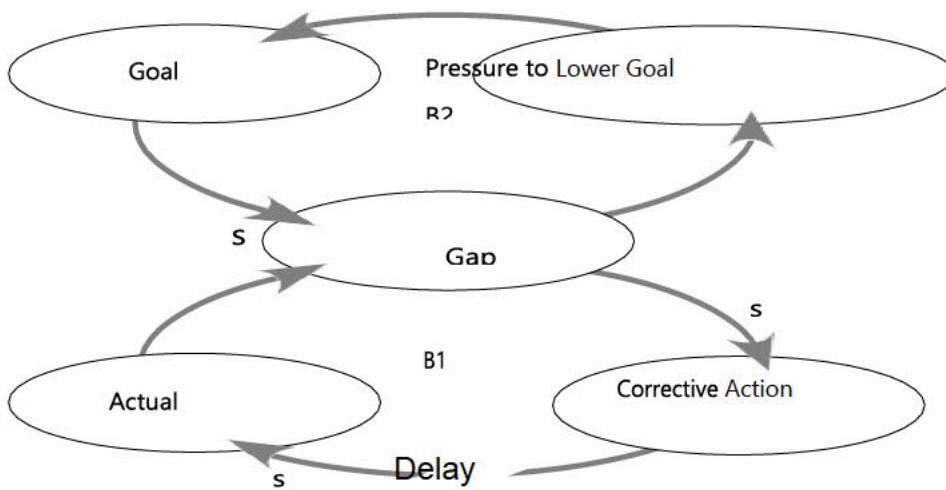


Figure 3A.5: The Systemic Structure Behind “Drifting Goals”

Source: Kim and Anderson (2011)

A gap between desired performance and present reality can be bridged in a "Drifting Goals" situation (Figure 3A.5), through corrective action to meet the objective or reducing the target, with a steady lowering of the objective frequently used to close the gap. The level of performance also decreases over time. Even when no explicit action is taken, this drift may occur so gradually the organization is unaware of its consequences (Kim and Anderson 2012).

Two related balancing mechanisms are at the heart of the "Drifting Goals" dynamic (Figure 3A.5). The first balancing loop (B1) involves actual performance, a gap between actual and intended performance, and a corrective action to close the gap. This loop also includes a lag between corrective actions and the impact of those actions on actual performance, suggesting the impact of corrective action frequently takes longer to be noticed.

Kim and Anderson (2011) highlight several factors that add to the lag, including:

- “The corrective action loop may take precedence.
- The lower goal loop has the potential to dominate.
- The balance of power can shift between the two”.

The first step in closing the gap is to determine what remedial efforts are (or should be) in place at present. Therefore, should a gap open, it allows identification of the pressures various participants associated with the performance variable felt and these can then be mapped onto the diagram's "lower goal" balancing loop (Kim and Anderson 2011).

3A.3.6 Structure behind “Growth and Underinvestment”

To determine the structure underlying “Growth and Underinvestment”, questions to ask include: “How would decisions affect demand for products or services?” and “How might new limits be created by cutting back on capacity investments?”

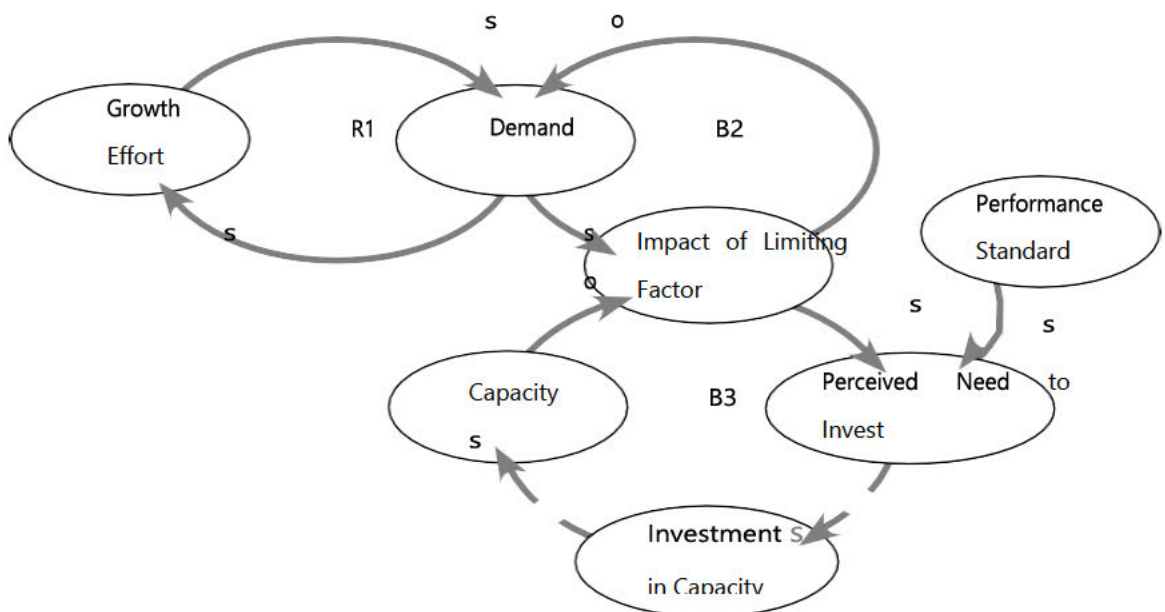


Figure 3A.6: Structure Behind “Growth and Underinvestment”

Source: Kim and Anderson (2011)

Kim and Anderson (2011) explain that “Growth and Underinvestment” is pertinent to many areas within an organization, with these ranging from sales and marketing to production; because it graphically illustrates interrelationships between individual growth efforts and investment decisions. This indicates significant value in demonstrating adverse consequences from fractured, “stovepipe thinking”.

3A.3.7 Success to the Successful

Two or more people, groups, projects, and initiatives, among others, compete for a limited pool of resources in a "success to the successful" situation. When one of them starts to become more successful (or was more successful before), it tends to attract additional resources, increasing the likelihood of continued success. Even should the other alternatives be better, their early success justifies the use of more resources, while depriving them of the resources and opportunities to create their own success.

Two reinforcing loops are linked by a shared variable in the CLD that depict the systemic framework underpinning "Success to the Successful" (Figure 3A.7). This core variable, "Allocation to A Instead of B," relates to the preference for party A over party B, such as resource allocation to A rather than B, favouring A over B, or belief in A rather than B. The energy in the system travels into the left-hand loop as preference for A over B increases (R1). The allocation of resources to A rises, this boosts A's success, which encourages continued or even expanded allocation of resources to A.

Simultaneously, favouring A over B results in a depletion of B's resources (R2). B's success decreases, or does at least not increase at the same rate as A's. This lacklustre performance by B (in comparison to A) supports the preference for allocating resources to A. The dynamics of many political realities in organizations, such as nepotism, the "fair-haired child," and pet projects, are best captured by this archetype.

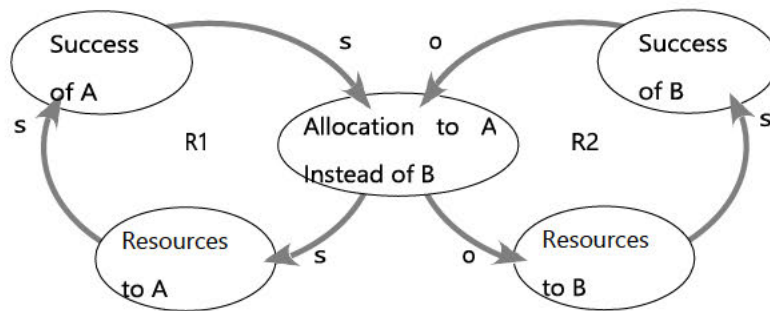


Figure 3A.7: Structure Behind “Success to the Successful”

Source: Kim and Anderson (2011)

To sketch "Success to the Successful" It is crucial to identify the core variable involving resource allocation and choice. This allows confirmation of the rationale for resource allocation having the impact to shift resources from one party to another, thus, ensuring a "Success to the Successful" dynamic is in place. The next step is to confirm the success leads to even more resources being allocated to the successful party. Finally, it is necessary to double-check that an increase or decrease in the allocated amount of resources results in higher or decreased success, respectively (Kim and Anderson 2011).

"Success to the Successful" asks what motivates people to succeed in specific conditions, while demonstrating how minor starting condition adjustments can result in significant long-term consequences. This is as with the 'butterfly effect' in chaos theory, where a hurricane hundreds of miles away can be the outcome of a single butterfly flapping its wings. When unclear with regard to the aim of the overall result, small, even though accidental changes at the start of a process can dictate the conclusion. This further highlights how we can convince ourselves to stay stuck in redundant business lines or ways of doing things, since we are already "excellent" at them (Kim and Anderson 2011).

3A.3.8 Escalation

In an "Escalation" situation, one party (A) responds to a perceived threat by taking action. The opposite party (B) interprets this behaviour as “creating an imbalance in the system, which makes them feel threatened”.

As a result, B responds by closing the space, which A perceives as generating an imbalance, and so on. The dynamic of two parties, each attempting to obtain a sense of "safety," as Kim and Anderson (2012) state, "becomes an overall reinforcing process that raises tension on both sides, sketching a pattern with the archetype's two balancing loops", as illustrated (Fig. 3A.8).

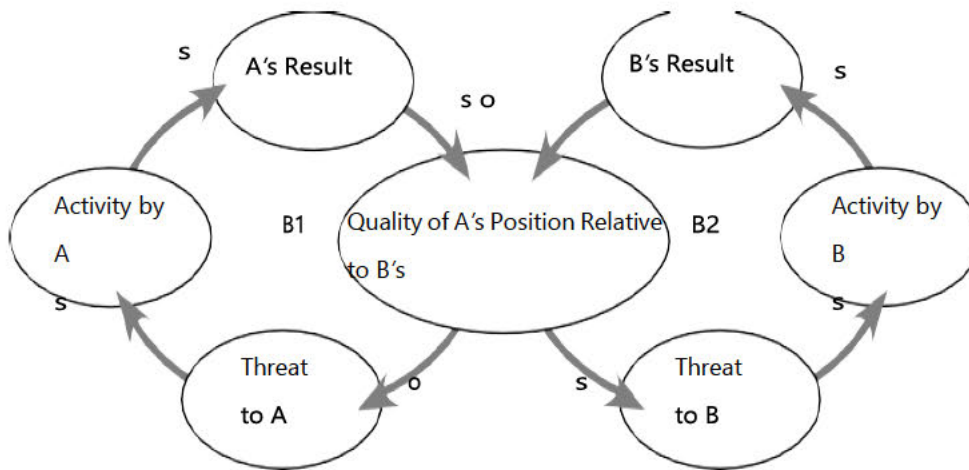


Figure 3A.8: Structure Behind "Escalation"

Source: Kim and Anderson (2011)

From the dynamic of this structure in the left-hand loop (Figure 3A.8), whenever A, acts by raising its activity, the quality of A's position in relation to B improves. This is because A is a left-hand loop (B1). After this, A has a more positive perception of its position relative to B, which causes it to decelerate its activity. However, as a direct result of A's actions, B is now in a position where it perceives A to be a greater threat. As a response, B has increased its activity, leading to improved results and an improved relative position in comparison to A (B2). As B achieves the sense of gaining the "upper hand", A again feels threatened and the loop repeats (Kim and Anderson 2011).

The "Escalation" structure frequently deals with insecurity, as the word "threat" suggests. This implies each person's or group's identity uneasiness or anxiety regarding their standing is what drives them to argue for the sake of being

right. Kim and Anderson (2011) assert: "The participation of a company in a price war may be a symptom of the company's concern regarding its ability to attract customers on grounds other than price"

A degree of objectivity can greatly assist to manage feelings of unease and anxiety. To achieve this objectivity and a more holistic perspective on the dynamics it is necessary to explore how the "Escalation" structure works and analyse the underlying mental models. In mapping the current circumstances of an organisation onto this archetype, the bigger and more long-term negative effects of a seemingly reasonable short-term response can be clarified (Kim and Anderson 2011).

3A.4 "TRAGEDY OF THE COMMONS"

What is referred to as the "Tragedy of the Commons," describes a situation where individuals use a shared resource through the pursuit of actions for own enjoyment or personal gain, with no regard for the "collective consequence" that follows when everyone does as they wish. Further to this, Kim and Anderson (2011) assert a point is reached when the aggregate of all separate activities become too much for the "commons," and accrued benefits to participants will diminish. The authors state the possibility of the commons becoming extinct.

The "Tragedy of the Commons" plot is a multi-player version of the basic "Limits to Success" tale. Individual parties concentrate on their own goals, such as expanding their private businesses that rely on a shared resource. Furthermore, the parties may rely on a less physical or other type of shared resource. The common resource in all "Tragedy of the Commons" scenarios is not owned or managed by a single person or organization, with the commons perceived as open and accessible to everyone (Kim and Anderson 2011).

There are limits that affect both the "Limits to Success" and "Tragedy of the Commons" situations, but they differ significantly. The restrictions encountered

in "Limits to Success" could be expanded with careful planning and proper resource investments. The major point from "Limits to Success" is the importance of balancing capacity investments and expanding demand in a timely manner to avoid insufficient capacity from impeding future growth. Boundaries are regarded as "fixed" in "Tragedy of the Commons", within the relevant time-frame of interest. The major takeaway from this pattern is to manage resource use in such a way the system never enters the third phase of fast decline.

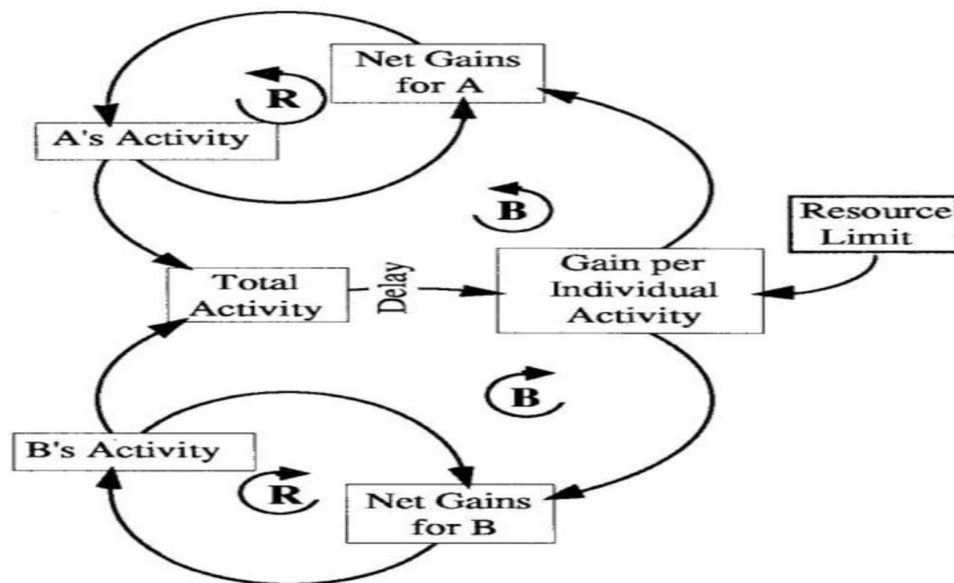


Figure 3A.9: "Tragedy of the Commons" CLD

Source: Kim and Anderson (2011)

In reality, a "Tragedy of the Commons" CLD is a combination of two smaller loop structures that are mirror reflections of each other, which gives the illusion the CLD is more complicated than it is, due to the many different players it reflects (Figure 3A.9). To sketch one of these scenarios in the easiest way possible, it is best to focus entirely on the activities player A is performing and then simply copy the loops for player B. It will be less daunting to draw a structure with three loops, as opposed to drawing a structure with six loops. After the reinforcing loop that pushes player A to continue his or her unique behaviour has been found, Kim and Anderson (2011) also highlighted the

question that arises, regarding what shared resource(s) might be stretched when numerous other players take the same action?

This line of reasoning ought to make it possible for the researcher to determine which shared resource each individual is utilising. Particularly when carried out at the beginning of a company's existence, adhering to the methodology described above can thus be of assistance in avoiding a "Tragedy of the Commons" situation. Important and challenging tasks will need to be accomplished to identify and reach an agreement on the commons, its boundaries and potential for depletion, the impact of individual use on the commons, and the mechanisms required to quantify and allocate usage, in order to avert a tragedy.

The books "Tragedy of the Commons," along with "Limits to Success," are excellent tools when examining the implications of limited resources. In addition, in a manner analogous to that of "Success to the Successful," this intricate paradigm has the potential to offer new light on the implications of making use of shared resources. The concept of the "Tragedy of the Commons" prompts an investigation of ways to potentially limit shared resource use, monitor how those resources are being utilised, and emphasises the importance of collaboration and overall resource management. In a similar vein, this archetype may prompt reflection on the accompanying repercussions of various expansion strategies in highlighting key assumptions on how resources are used and the impact expansion has on those resources (Kim and Anderson 2011).

3A.5 POTENTIAL OF ARCHETYPE USE

The use of archetypes benefited this study in answering the questions related to "Leadership Capabilities for improving Financial Management inefficiencies in the Public Sector". Arkers (2015) maintained archetypes are a key component of systems thinking. They are repeating patterns of behaviour that provide insight into the systems' structures, while they also provide a method

for understanding SD in a variety of disciplines, settings, and circumstances. Furthermore, archetypes are referred to as the world's narratives. Archetypes, as with formulas in movies such as "buddy comedies" or mysteries, enable systems thinkers to view behaviours and flows in more concrete terms (Arkers 2015: 45).

A systematic examination demonstrates how scholars have used the archetypes approach to analyse sustainable development strategies. These archetypes explain similar patterns in the systems of concern and can be used to forecast probable outcomes as a diagnostic tool. This systems knowledge is then utilised to inform policy or management initiatives through analysis of how certain interventions may change systems behaviour and lead to sustainability-related outcomes (Banson *et al.* 2016). In this regard, Sietz *et al.* (2017) identify regions with strong possibilities for sustainable intensification in Africa's drylands using spatially detailed archetypes of vulnerability.

Adger *et al.* (2003) suggest archetypes are also useful prospectively for planning, in that they are sometimes used to examine whether the policies and structures under discussion may change the organizational structure in such a way that archetypal behaviour results. Managers who discover this can take corrective action before the modifications are implemented and ingrained in the organization's structure. They can also help realign decision-making and knowledge scales by producing multidisciplinary knowledge about multiscale phenomena, in which local patterns are causally linked to national and global dynamics (Adger *et al.* 2003).

Oberlack *et al.* (2019) conclude while generalising from individual case studies is arbitrary, knowledge of recurring patterns makes empirical learning more accessible for decision-making in bigger jurisdictions.

3A.6 LIMITATIONS OF THE ARCHETYPE

The archetypes technique has several drawbacks. For starters, archetypes presume when the same archetype applies to both circumstances, knowledge from one case can be transferred to the other. To determine the extent to which system or problem archetypes can explain the success of policy or strategy archetypes, this assumption must be verified systematically and empirically. When the same policy or strategy has various outcomes in cases with the same system or problem archetypes, the latter must be modified, for example, by nesting archetypes (Sietz *et al.* 2017) and specifying more exact circumstances to which specific archetypes apply (Magliocca *et al.* 2018).

Archetypes, according to Arkers (2015), rely on heuristics, which are mental shortcuts used to make sense of the world. Used to assist in altering a problem's viewpoint from one of blame to one of curiosity and constant inquiry, archetypes can be employed diagnostically or prospectively. Furthermore, archetypes aid managers in recognising patterns of behaviour that currently exist in their businesses, providing a way to obtain insight into the underlying system structures that give rise to archetypal behaviour. Although archetypes are most commonly used in this way they are, nonetheless, useful instruments to start the search for a solution to the question, "Why do the same problems repeat across time?" (Arkers 2015).

With minimal knowledge on the nature of complexity, one wonders where to begin in attempting to understand it and its influence on the world around us. Complex system archetypes may provide an answer (Arkers 2015).

3A.7 SYSTEMS DYNAMICS IN THE PUBLIC FINANCE MANAGEMENT SYSTEM

Forrester (1961) thought real-world situations could be explained using closed CLDs that included levels, flows, auxiliaries, and rates, as well as tables, constants, or exogenous variables, and delays in the influence level (state or

condition) of one variable on another. The behaviour of the entire system is described as represented by the delineation of these elements.

Figure 3A.10 shows, on the one hand, the Factors Thinking representation merely enumerates a set of factors that, in some way, “influence” the learning process. On the other hand, Operational Thinking captures the nature of the learning process by describing its structure.

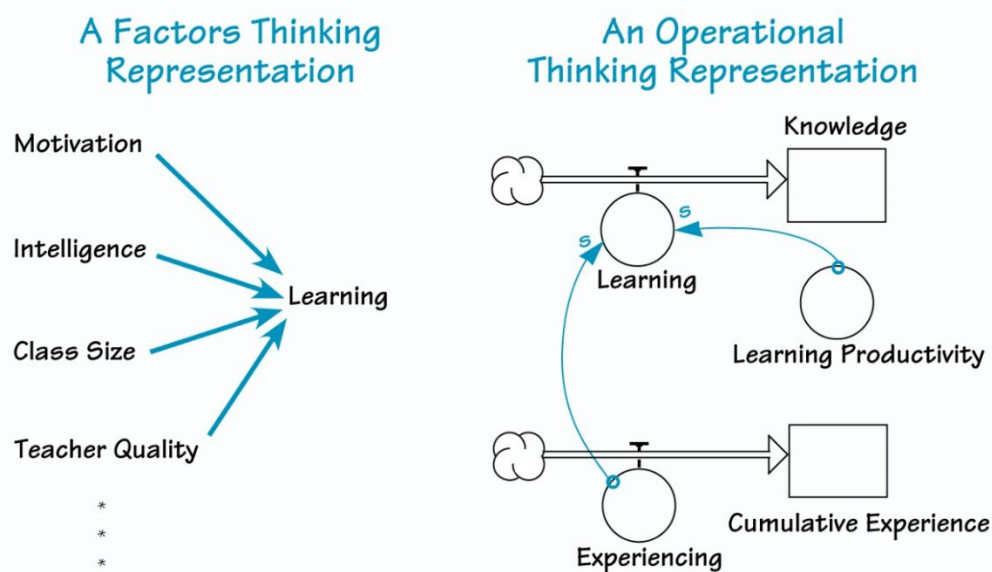


Figure 3A.10: Operational Thinking

Source: Adapted from Forrester (2007)

Systems thinking can serve as an entry point to the development of a dynamic knowledge of difficult circumstances; in this sense, systems thinking can be compared to a "door opener" for SD. Forrester (2007) explained it places more of an emphasis on the existence of a system, whereas SD makes it possible to provide a more specific description of how a system behaves, through the use of modelling and simulation. Forrester (2007: 14) added SD's strength lies in its capacity "to deal with the complexity, nonlinearity, and feedback loop patterns seen in social and physical systems, [allowing us to] organise, clarify, and integrate knowledge to better and more completely understand the

system." As Forrester states: "It is only through actual simulations that flaws within our mental models are uncovered" (Forrester 2007: 14).

Forrester, in the book "Industrial Dynamics," published in 1961, makes a point to underline the value of models on page 49. A model is regarded not only for its capacity to represent a system, but its capacity to provide a more effective basis for comprehending the system's behaviour characteristics, instead of physically observing the system itself. This ability distinguishes models from other types of representations of systems, because a model can deliver information at a lower cost and in a shorter amount of time than traditional methods (Maani and Cavana 2007).

The representation of modelling in SD is done with the help of stock and flow diagrams, which show stocks, flows, auxiliary, and feedback loops (Sterman 2000; Maani and Cavana 2007). The fundamental structure of a stock and flow diagram is depicted here in Figure 3A.11. Flows are effectively converted into levels, rates, and auxiliary variables through the modelling process (Rodriguez-Ulloa and Paucar-Caceres 2005). The purpose of this stage is to develop a computer-based model able to monitor both the dynamic behaviour of the variables as well as the links between them (Lane and Oliva 1998).

The study has, therefore, embarked on the seven critical skills provided by Barry Richmond (1993), discussed in the below section, in order for the researcher to learn from past experiences, on issues regarding leadership capabilities in the improvement of financial management, and to enhance service delivery within the selected municipalities.

3A.7.1 The Seven Critical Thinking Skills by Barry Richmond

When a researcher engages in the process of systems thinking, it is found specific talents are utilised more frequently in each step of the process. According to Richmond (1993: 16), "seasoned systems thinkers have mastered at least seven independent yet interrelated thinking skills." Richmond

(1930) states when a researcher uses a strategy based on systems thinking, they develop these skills in the following order, Including, but not limited to: Closed-Loop Thinking, Quantitative Thinking, Scientific Thinking, and Dynamic Thinking, as well as System-as-Cause Thinking, Forest Thinking, and Operational Thinking.

The techniques involved in using the SD approach vary from practitioner to practitioner, however, all involve recognising the actual problem rather than focusing on the symptoms of the problem or the events that generate problems. This stage, sometimes referred to as problem articulating, is essential for justifying and clarifying the purpose of the entire modelling process (Sterman 2000) The CLDs are then transformed to a stock and flow dynamic model, using one of the several computer software packages available to aid with SD modelling logic (Sterman 2000; Maani and Cavana 2007). The computer programs Stella Architect, iThink, (Isee systems) and VENSIM, are only a few examples of those that can be utilised in the process of constructing a dynamic model (Maani and Cavana 2007).

Figure 3A.11 depicts stock as a rectangle, which reflects accumulations of inventory, population, level of knowledge, and other factors. Additional components of stock include population and level of expertise. Since stocks represent the status of the system, they will continue to exist within the system even when there is not a single flow. This is due to stocks being visual representations of the system. When illustrating flows, an arrow pipe is utilised, with an arrow that points into a stock signifying an inflow and an arrow that points out of a stock showing an outflow. The term "flow" refers to the way stock varies over the course of time. Regulators, often commonly referred to as valves, are used to control the flow rate in flows. Clouds are another important symbol, since they depict both the beginning and the end of a flow of something (Sterman 2000: 93).

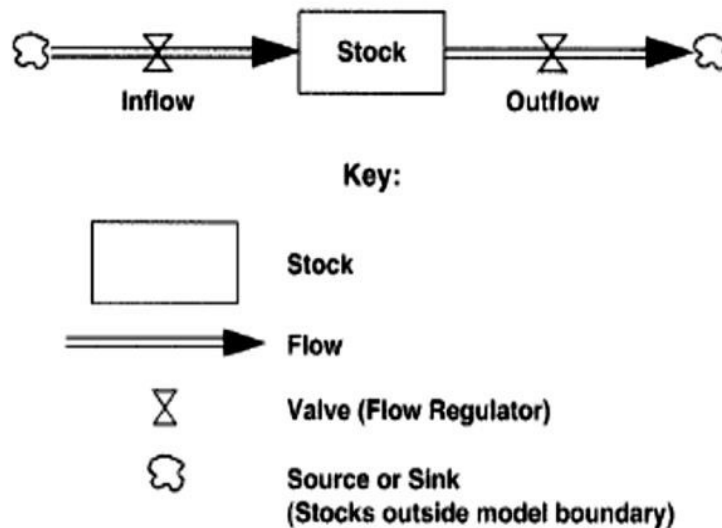


Figure 3A.11: Basic Structure of Stock and Flow Diagram

Source: Sterman (2000: 193)

CLDs are very effective for expanding thinking boundaries and communicating important interdependencies. Nevertheless, they are not a particularly good basis for a full-blown model and simulator that computes dynamics and performance over time. A better resolution of the causal network is needed for a working model, since causality and dynamics involve more than merely words and arrows. The main new concepts required to build simulators are presented in this section. These concepts “transform a simple sketch of causality into a portrait (or better still an animation) that brings feedback loops to life, by specifying the realistic processes that lie behind causal links as the basis for an algebraic model and simulator” (Sterman 2000: 95).

3A.7.2 Purpose and Use of CLDs for this study

According to Sterman (2000: 196), CLDs provide a unique perspective on business and society, demonstrating “what is connected to what and how changes in one section of the system can propagate to others and back”. It is believed we live in a linked world; however, our only means of expressing this intricacy is language. CLDs are short and graphic diagrams that illustrate both obvious and hidden connections. Furthermore, they can be used to elicit and

capture individual or group mental models, as well as to broaden people's thinking beyond the local.

Another use for CLDs is to capture dynamic behaviour hypotheses. Sterman (2000: 35) emphasised, "To think about feedback systems, the beginning of the mind shift is critical". The structure of any organization relies on the "network of balancing and reinforcing feedback loops that drive performance across time, [which] influences its future temporal course to some extent. CLDs exemplify this critical philosophical viewpoint by confirming the critical feedback loops thought to be responsible for observed performance" (Sterman 2000).

3A.7.3 Strengths and Limitations of SD

It has become evident one of the most notable SD strengths is the ability to develop a rigorous model that accurately captures the dynamics of real-world situations (Rabbinge, Leffelaar, and Van Latesteijn 1994; Jackson 2002; Rodriguez-Ulloa and Paucar-Caceres 2005). Experimenting in the real world is more time-consuming, dangerous, and unethical than simulating an intervention using a model, which can be done more quickly (Jackson 2003). Although SD is regarded as an effective method for analysing complicated situations that occur in the real world (Rodriguez-Ulloa and Paucar-Caceres 2005; Rodriguez-Ulloa *et al.* 2011), it does have a few drawbacks. These include the inability to provide sufficient information on the technique to clearly define 'the problem' (Lane and Oliva 1998).

According to Forrester (1961), one of the most important steps in SD methodology is problem identification; despite this, suitable methods to completely understand the problem were not provided (Lane and Oliva 1998; Rodriguez-Ulloa and Paucar-Caceres 2005). The widespread belief that SD practitioners are more concerned with constructing and validating a model that accurately mimics real-world occurrences, than with determining whether the "problem" being studied is truly "the problem", is the root cause of this issue.

The rationale for this stems from the above belief. In SD, it is assumed all parties agree the defined problem is the actual problem. This shows SD has not taken the various interests and goals of the observers into account (Rodriguez-Ulloa *et al.* 2011).

In addition to being accused of disregarding the interests of observers, SD has also been condemned for ignorance concerning socio-political problems. Every company has to deal with power issues, yet, SD does not have the resources or organisational structure to adequately address these concerns (Lane and Oliva 1998). One more argument against SD, is the challenging nature of its suggestions, both to acknowledge and put into practise. It is recommended stakeholders communicate with each other at all phases, which will give them a feeling of ownership over the outcome. This will address the belief this problem is due to the isolation between decision makers and analysts (Jackson 2002).

3A.8 CONCLUSION

In Chapter 3A, a synopsis of systems archetypes and SD was provided, however, this research firstly explained what systems archetypes and SD are, as conceived by Jay Forrester in the late 1950s. Nevertheless, it has recently become an important discipline. SD is widely used in the private sector, for example, in the oil industry, asset management, financial services and defence, and consulting. Learning is based on observing patterns of behaviour in an organisation and grounding these in a structure of organisation. With regard to operational processes and policies, SD represents events, usually orientated in CLD, in order to obtain feedback on the solution and represent a mind shift. SD represents patterns by re-enforcing models that demonstrate different behaviour in PFM.

SD offers several different software programs that can assist a researcher in modelling these systems archetypes. For this research, the use of “Vensim 6.0” was the most used software to create archetypes and SD models. With

these tools, it is possible to demonstrate factors such as knowledge, morals and attitude by means of models. Systems archetypes as a structural pattern template were presented and created by Kim (2000) and widely explored and employed in this study. This chapter will enhance the study objectives and contribute to the use of systems archetypes presented in systems thinking.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter provides a practical approach to systemic research used to explore how PFM can be enhanced through leadership capabilities. This was applied in the province of KwaZulu-Natal (KZN). Key strategical officials concerned with financial management were interviewed within COGTA. The research instruments administered were semi-structured interview guides, developed using CSH. This was done to develop a full CLD, wherein systems archetypes were then identified. The interviews were undertaken with 10 participants from COGTA KZN. Scripts from the interviews were analysed using NVIVO Version 12, whereby themes were generated that informed the underlying structure, which is the bedrock of PFM as informed by leadership.

A brief summary of the approach, as directed by the SD model developed by Sterman (2000: 87), is as follows:

- Boundary identification and delimiting of the system under investigation. Initial conceptualisation as it was discussed with the problem owners, actors, and those responsible for transformation.
- Primary conceptualisation of problem with key stakeholders and identification of critical pillars of PFM during an iterative process, which involved consulting academic and grey literature.
- Development and formulation of a dynamic hypothesis.
- Main CLD development.
- Identification of systems archetypes.
- Policy formulation recommendation.

4.2 RESEARCH AREA/LOCATION

This research focused on COGTA in the Province of KZN. It consists of Chief Directors, Directors of HR, Traditional Affairs, Disaster Management, and other sectors within the department. The emphasis of this research was influenced by the COGTA constitutional mandate, embedded in the new Constitution as of 1996. The mandate aims to provide interventions in Municipalities, which include the “issuing of directives, and managing interventions by provincial executive council” in accordance with the provision of section 139(1)(a), (b) and(c), to mention but a few. However, despite this, the provincial profile of protests for 2019 (figure 4.1) sparked by lack of service delivery, were relatively similar to those of previous years. This is other than a slightly more prominent KZN and less prominent Mpumalanga, Northwest and Northern Cape. It is important to consider the most protest-prone provinces are also the most populated and this led to the selection of KZN (Hesse-Biber 2019), as the researcher is also based in this area.

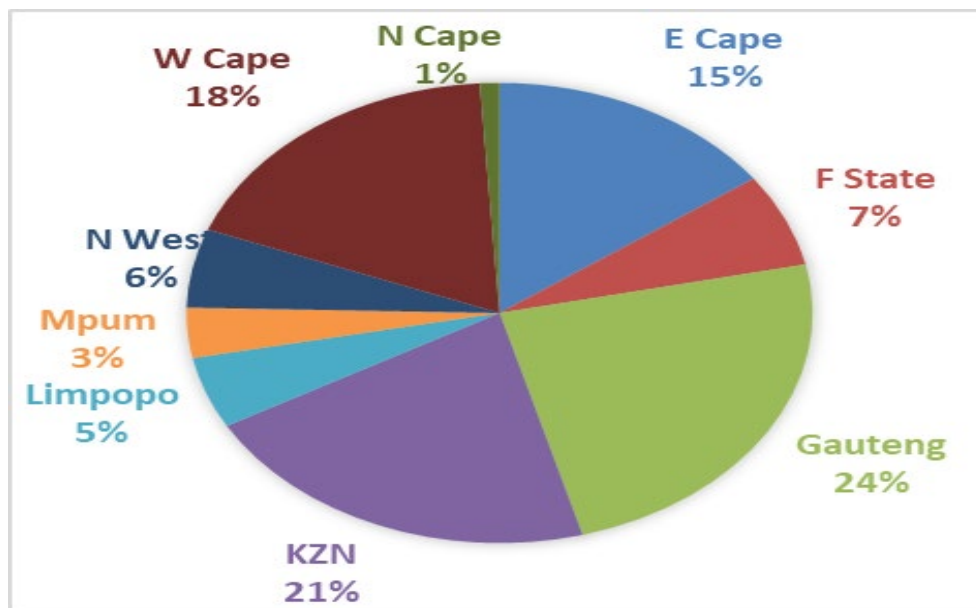


Figure 4.1: Service delivery protests by province, 2019

Source: Hesse-Biber (2019)

Figure 4.1 above, indicates the prevalence of protests that have engulfed the provinces, and the auditor's report clearly points to misuse of funds within Municipalities. Hesse-Biber (2019) reported the protest tally in 2019 was already uncomfortably high (Figure 4.1) and would probably reach a new record, with this taking place at the same time protests were held around the globe, raising concerns that resonate with South African communities, such as inequality and corruption.

These grievances were even more pronounced by a sluggish local and global economy and took place in SA at a time when political leadership was still struggling to overcome internal factionalism (BBC News 2019). The protests were

“[...] violent (impinging on the freedom of movement or property of others, including the state) or peaceful, however, there is clear dissatisfaction with the management of several municipalities thus the need for a more robust approach to issues that people expressed their dissatisfaction such as PFM” (Hesse-Biber 2019).

4.3 THE NEED FOR A SYSTEMS APPROACH TO PFM

This study approached PFM, a crucial issue in the management of councils, from a systems perspective. The origins of systemic approaches can be traced back more than 50 years to the work of experts such as Von Bertalanffy in the 1950s. There are established standards and practises specific to systems research. Additionally, it departs from conventional research methods in a more significant way. The world is seen from a systems perspective, composed of several systems or pieces that, together, make up the whole. The systems are complicated, since these parts are made up of several other parts.

In order to overcome obstacles, one must thus comprehend and research both the whole and how the parts interact. In addition, it is important to identify the fundamental principles governing how such systems operate, before tackling

problems from that paradigm, because it provides us greater leverage (Jackson 2002). Multiple relations, self-organization, causal relationships, and reflexivity, as well as determinism, and holism are among the characteristics of the underlying relationships found in different systems.

Because of this, PFM was seen as a system and its significance in enhancing service delivery, reducing poverty, and achieving development goals was viewed from a dynamic angle. Building on already-existing talents, rather than imposing external solutions, is the latest advice for increasing capacity. In most towns, a major impediment to PFM reform is a lack of managerial and professional skills, which translates into a mind-set that favours the status quo. Gildenhuis (1993: 54) contends some fundamental democratic values serve as the cornerstones of PFM. Among them are the following: a) public financial decisions should always aim to distribute public financial resources in a reasonable and equitable manner, as well as the most effective and efficient way possible; b) the best use of public financial resources must satisfy the needs of the entire population; c) the tax burden must be distributed fairly and equitably; and d) elected political representatives should be accountable and responsible.

It is stated all financial management and administration activities must take place in public, rather than under the cover of secrecy or so-called confidentiality. The executive authority's responsibilities in meeting collective needs ensure a programme is implemented effectively and efficiently (Siswana 2007).

4.4 RESEARCH PARADIGM

The differences between qualitative and quantitative research are described by Creswell (2013). Quantitative, qualitative, and mixed methods are all acceptable in both basic and applied research. In quantitative studies, researchers seek to define and describe a phenomenon in terms of a single or

multiple numbers. Non-numerical, descriptive, and relying on arguments and words, qualitative research seeks to understand and articulate meaning and context via the study of human experience. The difference between a structure and a pattern is, the former deals with numbers and the latter with characteristics. Quantitative research is used to analyse how random the data are, what the mean, variance, and distribution function are, whereas qualitative research is used to examine why certain data are random (Creswell 2013). Due to the sensitive nature of discussing leadership abilities in PFM, this study adopted a qualitative research strategy.

Quantitative and qualitative research methods have been the subject of much debate in the social sciences in recent years. There is a wide range of opinion among academics on the appropriateness of combining the two approaches to study. Some researchers see them as incompatible, because they were developed from different philosophical foundations. “Many positivism, interpretivism, and critical paradigms need to be appraised in addition to ontological and epistemological concerns when comparing and contrasting qualitative and quantitative research” (Denzin and Lincoln 2011).

4.5 ACTION RESEARCH

This study was, essentially, action research that applied a qualitative research approach. Jupp (2006: 8) argues action research is a sort of applied social research that tries to improve social problems by implementing change interventions, including a collaborative process between researchers and participants. The procedure is considered as both instructive and powerful. Nonetheless, according to Jupp (2006), action research should not be confused with evaluation research, which aims to quantify the impact of interventions without including people in the process. As Greenwood and Levin (1998: 6) point out, “action research aims to increase the ability of the involved community or organisation and members to control their destinies more effectively and to keep improving their capacity to do so”.

According to Waterman *et al.* (2001: 57), it was further suggested action research has the potential to go “beyond an analysis of the status quo to directly consider questions of ‘what might be’ and what can be”, while Bryman (2010) maintained action research is more common in some social science areas than others. In sectors such as business and management research, as well as social policy, action research is more common. Some scholars support this type of research, because it encourages people to participate in the diagnosis of problems, rather than simply applying remedies to them (Bryman 2010).



Figure 4.2: Action Research

Source: Gita and Apsari (2018)

Action research claims the best way to understand complex social processes is to introduce interventions or "actions" into them and observe their effects (Figure 4.2). The researcher in this method is frequently “a consultant or a member of a company who takes an activity, such as new organizational procedures or new technology, in response to a real problem, such as diminishing profitability or operational bottlenecks” (Gita and Apsari 2018).

Theory, which should explain why and how specific actions could result in the desired change, must serve as the researcher's guidance. The researcher then evaluates the effects of that action, makes necessary adjustments, learns from the experience, and develops theoretical understanding of the target issue and

potential solutions. The extent to which the selected course of action effectively resolves the intended issue supports the original idea. Action research is the best way for bridging research and practise, since it simultaneously addresses problems and develops new insights. This trait sets action research apart from all other research methodologies. The generalisability of results is frequently constrained to the context in which the study was conducted, and this method is also suitable for researching particular social problems that cannot be replicated outside that context. However, it is also susceptible to researcher subjectivity and bias (Gita and Apsari 2018). Action research is used in this study to create knowledge in the PFM and leadership fields. As a result, PFM is founded on action, assessment, and practise, based on gathered data in order to improve.

4.5.1 Reflection on action research and models use in a learning organization

Action research is both participatory and reflective in nature. This is significant, because reflective thinking is essential in the development of knowledge for use in the design process in organizational design (Heusinkveld and Reijers 2009). The combination of cognitive knowledge release and comprehension of the structural dynamics of the design issue is what allows for improvement (Barbaroux 2011). "The process of problem formulation, problem diagnosis, design, and implementation, followed by evaluation in an iterative process," as recommended by Hevner *et al.* (2004) and Heusinkveld and Reijers (2009), could be used to carry out this reflection. According to Kemmis and McTaggart (2002), action research "consists of a reflective cycle or spiral that includes planning, acting, and observing the process and consequences, reflecting on these processes and consequences, and then re-planning, acting, and observing, reflecting, and so on" (Figure 4.3).

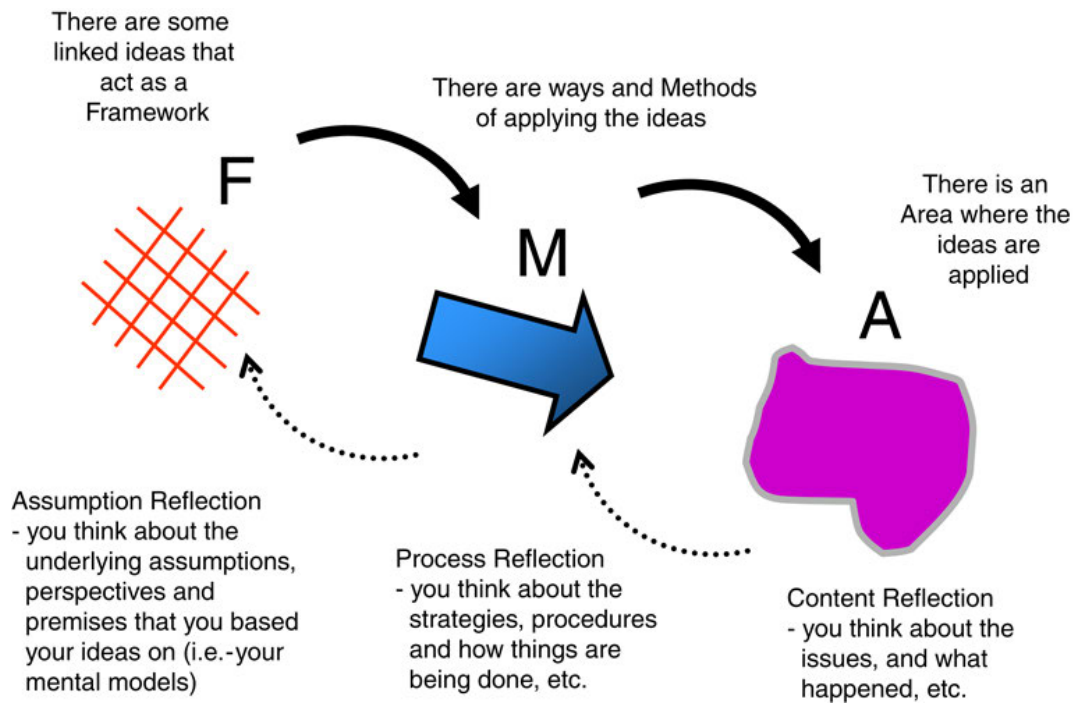


Figure 4.3: Reflection model using FMA

Source: Sara et al. (2002)

Molineux highlights while action research may take longer than other approaches, a higher level of change acceptance is achieved when involvement levels are also high. The use of action research methodologies is thus advocated, paired with appropriate systems thinking approaches for systems design and change, since they are “created to be applicable to specific contexts in a variety of organizations, for long-term change implementation” (Molineux 2018).

4.6 RESEARCH QUESTIONS

Semi-structured interviews with 10 participants from COGTA in KZN were conducted to better understand the study questions. The interviews were aimed to spark discussion and allow individuals to share their personal experiences with PFM in the province. When participants have difficulty ‘seeing the wood for the trees,’ research questions might provide valuable insight (Bryman 2010). In summary, as shown in the table, the study research topics were aligned to Ulrich (2002) associated sources (Table 4.1). The

researcher examined these issues by conducting semi-structured interviews to obtain qualitative data.

Table 4.1: Research questions

Research Questions	Related/ Associated to Ulrich Source
<ul style="list-style-type: none"> What are the participants' perspectives and opinions that give attention to complex modernised public financial management structures? 	Source of Motivation
<ul style="list-style-type: none"> What are the systemic weaknesses of inefficiencies for public finances management affecting service provision? 	Source of Power
<ul style="list-style-type: none"> How best can the current challenges affecting leadership in public financial management and service delivery be approached? 	Source of Knowledge
<ul style="list-style-type: none"> To what degree does the restructuring of the state sector motivate employees to contribute to quality service provision in the historical sense of public sector as well as the history of institution-building in South Africa? 	Source of Legitimation

For the purpose of this study, the researcher investigated the questions presented in the above table by collecting data through semi-structured interviews.

4.7 RESEARCH DESIGN

DUT's ethical clearance and a copy of the proposal were sent through KZN COGTA's research department, which was then forwarded to COGTA HOD for approval. The COGTA HOD functioned as the department's gatekeeper for this study. After that, permission was granted and a letter of access issued (Annexure A). The researcher received a list of all participant's email addresses so they could be contacted to participate. Participants received letters outlining the study aims as well as the instrument utilised in this study (Annexure E). The messages were delivered to the officials' email accounts, and their identities were secluded throughout the research. Participants provided feedback by returning the instrument via email to the researcher's address.

This research aimed at exploring how PFM can be enhanced through leadership capabilities. The study also sought to understand how different styles of leadership approaches can be canvassed to improve service delivery, with those that dovetail with the 4IR emphasised, as they can enable management of resources in a VUCA environment. Hence, the Chief Directors, and Directors from COGTA form part of this research as participants, whose subjective perceptions shaped the empirical data of the study; hence, a qualitative approach was deemed appropriate, as it would deal with the topic in an empirical manner.

The framework for data gathering and analysis is provided by research design; it reflects judgements on the relative importance of various aspects of the research process (Bryman 2010). This study used a qualitative research paradigm, which included semi-structured interviews. According to Leedy (1993), "qualitative research is founded on the notion of experience offers the most valuable information". Furthermore, "qualitative data is thought to deliver vast amounts of high-quality data from a small number of people and is targeted at comprehending the world of participants from their point of view"

(Walker 1985). As this study is dependent on people's perceptions, performing a quantitative review would have been impossible.

Given the complexity of both PFM and leadership, Mashego (2015) argues a qualitative approach is most suited to data gathering. This is because qualitative methods allow for the exploration and description of participant experiences. A qualitative study is one in which the researcher engages in on-going conversation with the subject, in order to learn how the subject makes sense of the world around them (Mashego 2015). Creswell (2013) explains in research design, the researcher decides on the type of study to perform, whether it be qualitative, quantitative, mixed-methods or a hybrid of the three. A research design is a strategy to inquiry that can be qualitative, quantitative, or a combination of the two to guide the steps taken in a study (Creswell 2013).

4.8 QUALITATIVE METHODS (PRIMARY AND SECONDARY)

Qualitative research was deemed necessary for this research, because this study examined leadership capabilities to improve financial management in the public space. Although it is important to define qualitative research because it is the focus of this study, it is difficult to do so clearly (Ritchie *et al.* 2013), as it lacks a distinct theory or paradigm and a distinct set of procedures or practices (Denzin and Lincoln 2011). Within the various fields of study, this term encompasses a wide range of methods and approaches. As a result, authors have provided a unique definition of qualitative research. For example, Strauss and Corbin (1990: 11) opine: "By the term 'qualitative research' mean any kind of research that produces results not obtained by statistical procedures or other means of quantification."

Various methods are used in qualitative research to explore attitudes, behaviour and experiences through, for instance, interviews or focus groups, in an attempt to obtain an in-depth opinion from participants. As it is attitudes, behaviour and experiences that are important, fewer people take part in the research, but the contact with these people tends to last much longer. Under

the umbrella of qualitative research there are many different methodologies. Examples of some of these methodologies are summarised below (Dawson 2002). Flick (2014: 142) claimed, “Qualitative research is interested in analysing subjective meaning or the social production of issues, events, or practices by collecting non-standardised data and analysing texts and images rather than numbers and statistics.” This definition stresses how people make sense of something in the world. Therefore, qualitative research is basically associated with multiple aspects (Denzin and Lincoln 2011).

Moreover, Denzin and Lincoln (2011: 16) postulated, “Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter.” In addition, it is apparent qualitative research is concerned with multiple perspectives, with Van Maanen (1979: 520) defining it as, “an umbrella term covering an array of interpretive techniques which seeks to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world.” Therefore, qualitative research seems to be an overarching concept, under which a variety of topics can be placed, with both positive and negative perspectives (Flick 2014), as shown in Table 4.2:

Table 4.2: Qualitative Research advantages and disadvantages

Advantages	Disadvantages
“Qualitative research approach produces the thick (detailed) description of participants’ feelings, opinions, and experiences; and interprets the meanings of their actions” (Rahman 2020).	Silverman (2010) argues “qualitative research approaches sometimes leave out contextual sensitivities, and focus more on meanings and experiences”.
The qualitative research approach (interpretivism) understands the human experience in a particular setting holistically. Denzin and Lincoln (2011), for example, mentioned that “qualitative research is an	Phenomenological approach, for instance, attempts to uncover, interpret and understand the participants’

interdisciplinary field, which encompasses a wider range of epistemological viewpoints, research methods, and interpretive techniques of understanding human experiences”.	experience (Wilson 2014; Tuohy <i>et al.</i> , 2013).
“From the perspective of epistemological position, any language assessment cannot be set apart from context, culture and values of where it was used” (McNamara 2001).	It was found that stakeholders frequently use quantitative research when research is called upon (Sallee and Flood 2012). “Policy-makers may give low credibility to results from qualitative approach”.
“The qualitative research techniques analyse the candidate behaviour, interviewer behaviour, interlocutor behaviour, and cross-cultural influences on behaviour during the speaking tests” (Lazaraton and Taylor 2007).	In terms of research method, “smaller sample size raises the issue of generalizability to the whole population of the research” (Harry and Lipsky 2014; Thompson 2011).
The qualitative research “admits the researchers to discover the participants’ inner experience, and to figure out how meanings are shaped through and in culture” (Corbin & Strauss 2008).	Thiessen, Buchan, and Daly (2016), state it appears primary research data collection was focused on thematic analysis, rather than the research topic, language tests, or language requirements.
“Qualitative research methods such as participant-observation, unstructured interviews, direct observation, describing records are most commonly used for collecting data” (Cohen, Manion and Morrison 2011).	“The analyses of the cases take a considerable amount of time, and one can generalise the results to the larger population in only a very limited way” (Flick 2011). For example, when a legislator needs to vote an issue, she/he cannot wait for three months for a qualitative

	study to be administered (Sallee and Flood 2012).
"Qualitative research design (interactive approach) has a flexible structure, as the design can be constructed and reconstructed to a greater extent" (Maxwell 2012).	Donmoyer (2012) argued "qualitative researchers can tell policymakers what works because qualitative research provides a dense description."

4.9 INSTRUMENT/ TOOLS

4.9.1 Procedures and materials used in the study

CSH, which uses a conceptual framework that includes, among other aspects, a collection of 12 fundamental categories of boundary judgements that can be put together in the form of a checklist of 12 boundary questions, was used to gather data for this study. Each question is on a fundamental boundary idea or 'category.' The term 'client', for example, refers to the group of people who will benefit from a plan, the people the plan is designed to help in the first place. Other terms that could be used are 'beneficiaries' or 'those in need.' The terminology used are unimportant and should not irritate someone because of a particular "consultancy ring" or for any other purpose, such as action research. What matters is their underlying purpose, or the challenges they are supposed to address. You can choose your own phrases depending on the application, as long as they help to remind you of the 12 boundary questions' aim (Ulrich 2002).

Sterman (2000) offers an overview of SD as an approach for improving learning in complex systems and solving real-world problems. It is also a way of picturing how the parts fit together, interact, and change over time, to think about and simulate scenarios and organizations of many sorts and sizes (Morecroft 2010). These definitions imply SD provides approaches and tools for studying the structure of relationships in a complex system and demonstrating its behaviour in a dynamic manner (Tedeschi, Nicholson, and Rich 2011).

Practitioners can visualise system behaviour in cyclic cause-and-effect interactions using these approaches. Structuring must provide reference modes and specifically set the time horizon from an SD standpoint. Reference modes are collections of graphs or other descriptive displays that demonstrate how the problem has progressed over time. The suitable time-frame for gaining a richer and better understanding of the topic is determined by setting the temporal horizon. These two methods will aid in dynamically characterising the problem by displaying a pattern of behaviour over time (Sterman 2000).

One of the first tasks in issue structuring should be to consult with important stakeholders in order to harness their perspectives and interest in the problem, as well as to build commitment and participation from the start. The second stage is to gather secondary evidence that demonstrates and clarifies the significance of the identified problem. Following this, group sessions (Visser 2007) should be held to foster new concepts and ideas from a “vast pool of raw ideas” (Maani and Cavana 2007).

SD and systems thinking are two distinct but compatible terms. SD emphasises the endeavour to understand that behaviour through informal maps and formal models, whereas systems thinking refers to mental efforts to reveal system behaviour (Richardson 2011). A model is a representation of a system; it is valued for its ability to provide a more effective basis for understanding the system's behaviour characteristics than observing the real system, due in part to its ability to yield information at a lower cost and in less time than observing the real system (Maani and Cavana 2002, 2007).

A summary of the Instruments is shown in Table 4.3, as adopted from Ulrich (2014).

The 12 Questions asked of the current situation (is), the ‘ought’ situation. These questions address four areas that involve the client (source of

motivation), the decision-makers (those making decisions), experts (source of expertise), and those affected (source of legitimacy), which should be part of the design process.

Table 4.3: Summary of Instruments

Boundary Issue	Root Issues	Main questions	Response Output (fill in Answer here)
Source of Motivation	What are the motivating factors?	Who is (ought to be) the client or beneficiary of public financial and resource management?	
		What is (ought to be) the purpose of managing public finances in Municipalities?	
		That is, what are (should be) the consequences of financial mismanagement and measure the measure of improvement to public financial management?	
Source of Control	Who is in control?	Who is (ought to be) the decision-maker in evaluations on financial management and service delivery?	
		What resources and other conditions of success are (ought to be) controlled by the decision-maker in financial management issues?	
		What conditions of success are (ought to be) part of decision environment which can attribute to financial mismanagement?	
	What information and skills are relevant?	Who is (ought to be) considered a professional or further expert in the execution of financial management?	

Source of Knowledge		What kind of expertise is (ought to be) consulted with to address the inefficiencies of financial management?	
		What or who is (ought to be) assumed to be the guarantor of success in the provisioning of services?	
Source of Legitimacy	What stakeholders should be considered?	Who is (ought to be) witness to the interest of those affected but not involved in public financial management?	
		That is, who is (should be) treated as a legitimate stakeholder, or those stakeholders who cannot speak for themselves, including future generations and non-human nature?	
		What secures (ought to be) the emancipation of those affected from the premises and promises of those involved in financial management? That is, where does (should) legitimacy lie in leadership positions?	

4.9.2 The use of Critical Systems Heuristics (CSH) in the study

Heuristics, according to Ulrich (2002), is the art or practice of discovery. Since there is no single appropriate way to decide such matters, replies will be based on personal interests and viewpoints, values, assumptions, and other factors. Systems thinking is important for this study because all problem definitions, solutions, proposal evaluations of outcomes, and so on, are dependent on prior judgments regarding the relevant 'whole system' to be examined. It poses a series of questions concerning the programme, including: What is and should be the programme's purpose and source of legitimacy? Who are the intended beneficiaries, and who should they be? Rather than asking what you see in situations, as most evaluation methods do, ask what you think. CSH digs

deeper into the underlying assumptions, such as values, power structures, knowledge bases, and moral attitudes, that influence how this situation is seen by many stakeholders.

Semi-structured interviews were used as an opportunity to explore leadership capabilities when dealing with financial management, which involved the 12 CSH questions. CSH's main goal is to encourage boundary critique, which is a systematic approach to dealing with border decisions critically. Boundary criticism can take one of two forms: it can attempt to handle boundary judgements self-critically (reflective practice) or it can use boundary judgments for critical reasons against individuals who do not handle them self-critically (emancipatory practice). The critical systems approach in this study addresses the predicament PF faces in achieving leadership competence, based on the 12 'is/ought' questions (Ulrich 2002).

The 12 boundary questions are arranged in four groups of three questions each. All questions are asked both in an "ought" and in an "is" mode. "Ought" mode represents what ought to be the case, and "is" mode refers to what is actually the case. Ulrich's CSH allows questions to be asked regarding who benefits from a particular system design and seeks to empower those affected by management decisions, but not involved in them (Ulrich 2002).

4.10 SAMPLING TECHNIQUE

The location of participants for this research was undertaken through a sampling technique. There are two types of sampling, namely probability and non-probability sampling. Probability sampling refers to the probability of being selected, while non-probability sampling refers to participants being chosen according to their relevance to the research topic. Figure 4.4 shows some characteristics of these sampling techniques. This research focuses more on attempts to find solutions to strengthen the systemic weaknesses in PFM, in order to take up effective leadership roles in a more proactive manner, and improvement of service delivery.

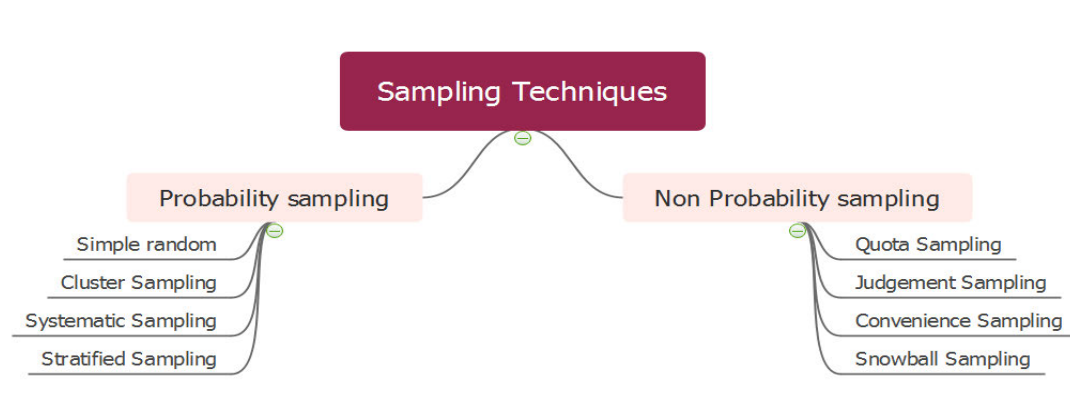


Figure 4.4: Sampling techniques

Source: Adapted from Lehangroo (2019)

In non-probability sampling, participants are selected on the basis of their relevance to the research issue, rather than on the basis of a predetermined selection scheme (Neuman 2007). Purposive sampling is a non-probability sampling method in which experts are consulted on potential subjects, in order to make informative case selections (Neuman 2007). He went on to say this strategy, in which the researcher uses recognised places to obtain potential instances for the study, was particularly useful for exploratory research of a difficult-to-reach group.

The following table summarises Neuman's (2007) description of the distinctions between probability and non-probability sampling (Table 4.4). This study's primary objective was to learn how to better manage resources in a VUCA environment by exploring various leadership styles and methods that can be employed to enhance service delivery. Consequently, the researchers opted to use a non-probability sampling method.

According to Neuman (2007), the focus of the qualitative researcher is more on the ability of the selected participants to clarify and deepen the understanding of social life than on its representativeness. Neuman (2007) further pointed out the qualitative researcher should be concerned with obtaining cases that can reinforce his or her learning about social life in a

particular context, which is why a non-probability sampling method is the right choice.

Table 4.4: Probability vs Non-probability Sampling

Characteristics	Probability Sampling	Non-probability sampling
Goal	To represent population	To deepen understanding of the issue
Language	Accuracy	Thoroughness
Application	Mostly quantitative study in large population	Mostly qualitative study in smaller population
Sample size	Predetermined	Hard to be determined in advance
Basis for sample selection	Randomisation	Gradually and purposively
Power	Produce accurate generalisation	Provide comprehensive understanding
Technique	Simple random, systematic, stratified, cluster	Haphazard, quota, purposive, snowball, deviant case, sequential

As presented in Table 4.4, there are at least six techniques for undertaking non-probability sampling (Neuman 2007, adapted from Setianto 2014). According to Cohen *et al.* (2011), the sample population must be relatively small for a qualitative research study to yield the desired results. In selecting participants for this study, a non-probability sample was used. In a non-probability sample, the probability that members of the population will be selected is known. Cohen *et al.* (2011) describe this as a situation where the researcher selects individuals who possess certain required characteristics based on their personal judgement. Both purposive and simple random sampling were used in this study. Data were obtained from senior directors and directors in their respective departments or units within COGTA. They were selected because they are in leadership roles, manage public finances,

and are expected to be knowledgeable and informative regarding the approaches used.

4.11 DATA COLLECTION

The collection of data was achieved by preparing and organising data using the NVIVO research instrument. The study reviewed and explored the data from the instrument. Codes were then created and reviewed to combine them into themes. These themes were then presented in a cohesive manner. The study adopted semi-structured interviews to generate data, with the majority of the interview questions addressing the objectives of this research.

McMillan and Schumacher (2010) define data collection as “a process that involves interactive and non-interactive strategies, with both participant observation and interviewing data collection tools having elements of interactive approaches”. An important component of the research is data collection and analysis. The survey in the study consisted of 12 CSH questions, adapted from Ulrich (2002). The aim was to conduct the survey with the 10 Chief Directors from the COGTA, within the province of KZN. Participants were given 30 minutes to undertake the survey anonymously, and all responded. The results were analysed using NVIVO version 12 and systems archetypes of SD developed. For the purpose of this study, the key instruments of CSH were extracted from Ulrich’s primary book.

4.12 ANALYSIS OF THE DATA

Qualitative data sets were analysed using thematic analysis and NVIVO, from which models of SD were created and shown as archetypes. The analysis of the research instrument involved thematic analysis of the responses. Data were converted to nodes, themes and codes. The coding was done separately and codes were developed and a thematic framework for the Chief Directors for COGTA KZN created in each data set. This study acknowledged the responses provided were quite significant, given the nature and state of public

affairs in the province. Analyses focused the study on the given content of PFM and the dynamics of the perceptions and views of the individuals. Data collected were arranged into themes that addressed the study's research questions. Creswell (2013), in contention with Merriam (1988), stated "data collection and analysis must be a simultaneous process in qualitative research". The primary approaches of this research involved SSM, SD and CSH, to enhance and support the objective of this research.

4.12.1 Thematic Analysis

Thematic analysis of this study generated categories as the following themes; source of motivation, source of control, source of knowledge and source of legitimacy. One of the most common approaches to qualitative data analysis entails thematic analysis (Bryman 2012), which is the process of identifying patterns or themes within qualitative data (Maguire & Delahunt 2017). Braun and Clark (2006) had suggested the qualitative method should be learned first, as "it provides core skills that will be useful for conducting many other kinds of analysis" (Braun & Clarke, 2006: 78). Maguire and Delahunt (2017) also urge the goal of a thematic analysis is "to identify themes, that is, patterns in the data that are important or interesting, and use these themes to address the research issue".

4.12.2 NVIVO Analysis

In this research, NVIVO was used to manage data for their respective different research designs. Data were then translated using Systems archetypes, following CLD and SD models were created using VENSIM version 9. NVIVO helped systems in early releases that define coding as the 'process of making passages of text in a project's documents with nodes'. The emphasis added nodes are, therefore, the route by which coding is undertaken (Bryman 2012). NVIVO seeks to identify and describe patterns and themes from the perspective of participants, then attempts to understand and explain these patterns and themes (Creswell 2014).

During data analysis the data were organised categorically and chronologically, reviewed, repeated and continually coded, with a list of major ideas that surfaced chronicled. The data analysis process was aided by the NVIVO program, which allowed the research to adapt the four steps, namely, first is to import data, then set up a coding table, with thirdly, coding, and finally, analysis of data.

4.13 DISCUSSION

A number of researchers have utilised a combination of systems approaches, such as Setianto (2014), who investigated small-holder beef farming in rural Indonesia using an SSM, CSH, SD, and systems thinking approach. Other researchers have also used combinations of systems approaches. During this same time period, Molineux (2018) utilised SSM and SD modelling in order to improve the quality of insights, as well as the final project outcomes for an organisation that utilised these methodologies. Both academics and industry professionals working in the subject of systems have recently shown a growing interest in the practise of employing a combination of approaches, often known as hybrid modelling, in order to more effectively manage complex, real-world scenarios.

The fact SD has been utilised in conjunction with mapping, strongly demonstrates the strength and usefulness of a strategy that utilises many methodologies. It is possible to better address the inherent ambiguity of scientific knowledge, particularly with regard to complex, multiply-determined, dynamic social phenomena, through the multiple viewpoints of diverse ways, as opposed to through the limited lens of a single approach.

Greene *et al.* (2001: 27) contend mixed methods, on the other hand, must be done with care and with a specific goal in mind. Combining methods from different paradigms, in particular, can lead to serious issues philosophically, in terms of "paradigm incommensurability," theoretically, in terms of effectively fitting methodologies together, and practically, in terms of the wide range of

knowledge, skills, and flexibility required of practitioners (Burrell and Morgan 1979; Mingers and Brocklesby 1997, cited in Schenker-Wicki and Schoenenberger 2015). In the field of public management, although use is made of SSM and other approaches, little research regarding the combination of either two or more systemic approaches is available. There was thus a need for this study, to explore how the approaches can be combined to solve organizational problems, as well as identify gaps in this field. These methods, according to Setianto (2014), could be used by practitioners who want to investigate a system with several stakeholders and is presumed to have a social power asymmetry, but are constrained by time and budget.

SSM, CSH, and SD were thus combined, with SD and CSH the bedrock of the research. These approaches are all dynamic and applied by researchers to attend to complex problems such as PFM. The process of research itself was systemic, as there was continuous iteration between the real-world problem and the information being gathered, as led by SD. The research instrument administered was drawn from CSH, with the assistance of concerned stakeholders to help refine the instrument. The outcomes of the study were also systemic, since they established the parts of the PFM system in the larger CLD and the parts affecting the system in archetypes. Respondents acknowledged the significance of financial management and leadership issues in PFM. According to the data gathered from interviews, several recommendations were provided to actively address these challenges. This was possible because of the qualitative research instrument, developed using CSH.

According to Creswell (2013), qualitative research allows for exploring and understanding the meaning individuals or groups ascribe to a social human problem. Thus, respondents expressed their perceptions and world views on the issue of PFM, while guided from a systems perspective. The use of group discussions and individual interviews also allowed for refined ideas for the former, as there was debate, while for the latter it allowed for in-depth individual

expression. Ultimately, the approach applied proved fundamental, as it unearthed people's mental models of how PFM should be administered.

4.14 CONCLUSION

The study, while qualitative in nature and using semi-structured interviews, also employed a systems approach. This was because PFM was identified as a system, meaning it was not static but rather, complex and as such, required an approach that could attenuate the complexity associated with this system and generate appropriate recommendations. Thus, essentially, this was also a multi-methodological approach, as one method could not extrapolate the richness associated with PFM. Therefore, systemic approaches to research can be applied, particularly when dealing with socio-economic human systems.

CHAPTER 5

DATA ANALYSIS

5.1 INTRODUCTION

Data collected were analysed using thematic analysis and NVIVO Version 12. The demographics of the participants are presented and discussed in brief to allocate the participant profile, while municipal financial management objectives guide the data analysis process. In addition, discussions and analysis of the data collected in response to the research questions from this study, are presented.

As mentioned in the previous research methodology chapter, thematic analysis by means of NVIVO version 12 was employed in this study, with the data analysis means, as well as its use to the study explained in this chapter. Participant demographics are presented and discussed in brief to allocate the participant profile, while municipal financial management objectives are demonstrated by means of tree diagrams and figures in the below sections. In addition, discussions and analysis of the data collected in response to the research questions from this study are presented. This chapter ends with the presentation of thematic and NVIVO analyses, specific views and findings, with recommendations.

5.2 PARTICIPANT DEMOGRAPHICS

Prior to discussing the various emerging themes, it is imperative the participants involved in this study are detailed. A total of 10 participants were interviewed, with the aim to contribute to understanding leadership capabilities for improving financial management inefficiencies in the public sector. The participants held different leadership roles in the COGTA department in KZN. Table 5.1 below illustrates the demographic profile of the participants. In order to determine whether the participants in a given study are a representative sample of the target population for generalisation purposes, demographic

information regarding the participants in the study was attained. Participants were chosen because of their vast knowledge and capacity in the area of PFM, since they deal with day-to-day issues concerning communities and policy; it was, therefore, necessary to choose COGTA as the relevant research participant in this study.

Table 5.1: Participants' Demographic Profile

PARTICIPANTS	GENDER	ROLE IN COGTA DEPARTMENT
Participant 1	Male	Chief Director
Participant 2	Male	Chief Director
Participant 3	Female	Chief Director
Participant 4	Male	Chief Director
Participant 5	Female	Chief Director
Participant 6	Female	Chief Director
Participant 7	Male	Chief Director
Participant 8	Female	Chief Director
Participant 9	Male	Chief Director
Participant 10	Male	Director

5.3 DATA ANALYSIS PROCESS

Thematic analysis was used to analyse data from the 10 respondents. This form of analysis is considered a “rigorous and inductive predictive process that aims to identify and explore themes from word-based data in a transparent and reliable manner” (Guest, MacQueen and Namey 2011: 15). After transcribing the audio discussions, the data were organised, coded, and grouped using themes, which were refined and finalised. The process involved was iterative and consisted of reading scripts and back-and-forth listening to audio recordings, to not miss any important information.

5.3.1 Data cleaning process

Interviews were conducted with chief directors of the COGTA KZN department. The recorded data were converted, transcribed, then uploaded into NVIVO 12 plus, qualitative data analysis software. The study's analysis procedures were created to facilitate and streamline the collection of data.

5.3.2 Computer-assisted qualitative data analysis software (CAQDAS)

All the information provided by study participants was coded and analysed using CAQDAS, NVIVO version 12 Plus software. Instead of manual coding, NVIVO version 12 was deemed the most effective software for the study, since it saves time and organises work simply and rationally. Additionally, the program aids in the formation of networks and relationships, resulting in a graphical representation of the data (Ngalande and Mkwinda 2014). Although the software enables the organisation of transcript data in preparation for analysis, it does not analyse the data; this is left to the researcher.

5.3.3 Coding process

A brief description of the coding process, as determined by the objectives and the resultant themes, is presented below, as this guides how the data analysis was conducted. Coding is defined as the application of tags to data to identify a common theme, keyword, or phrase (Myers 2013). An example of the coding process and how themes and codes are created, is shown in Table 5.2. The code "General public" was used to give meaning to the information provided by participants. Therefore, the theme "beneficiaries of public finance & resource management", was generated through code grouping.

Table 5.2: Coding process example

Theme	Code	Information from transcript
Beneficiaries of public finance & resource management	General public	Well, I believe that the people or constituencies ought to be the clients or beneficiary of Public Finance, and it should

		serve their interest as they are expected to receive services from government.
--	--	--

After the data have been coded, they are organised into groups based on the codes. When coded data were grouped, diversity started to emerge. Figure 5.1 illustrates the coding procedure.

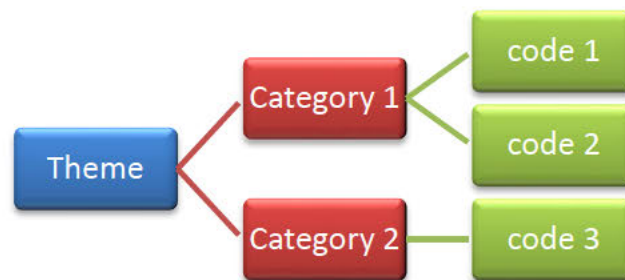


Figure 5.1: Coding process

5.4 MANAGING PUBLIC FINANCES IN MUNICIPALITIES

Participants in the study shared their views regarding the core objectives of financial management. They mentioned PFM is there to enhance effective service delivery; to enforce transparency and accountability; to ensure financial management compliance; and to prevent misuse of funds, as well as to promote efficient expenditure (Figures 5.2 and 5.3). These are discussed below.



Figure 5.2: Tree diagram of managing public finances in municipalities

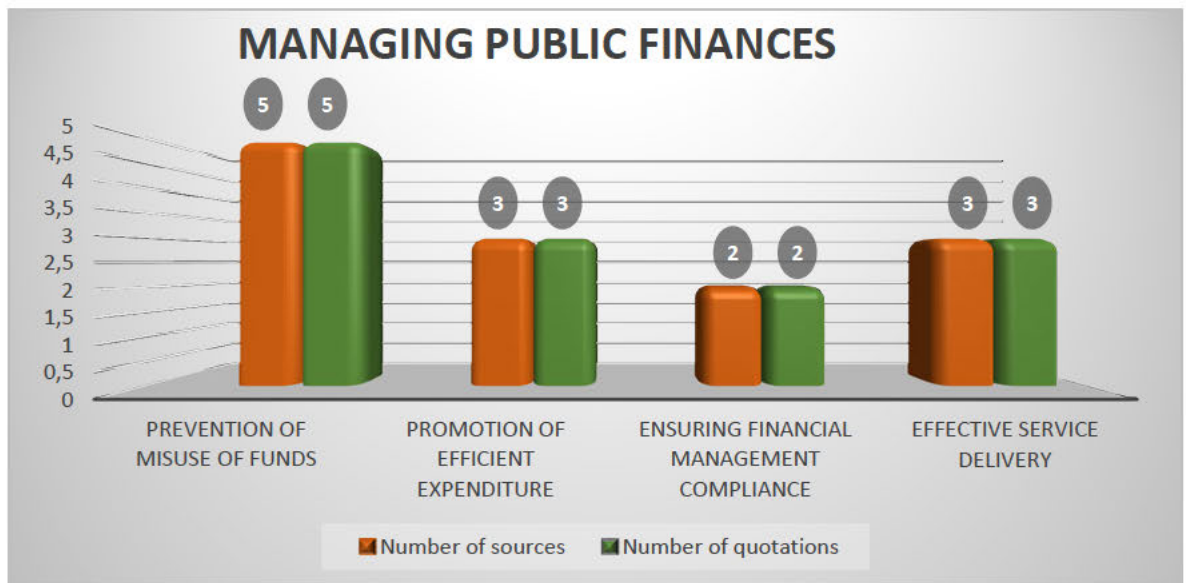


Figure 5.3: Managing public finances

5.4.1 Effective service delivery

Convergent views persisted regarding the purpose of financial management. Effective service delivery was outlined as the main purpose for PFM. For instance, Participants (4, 8, & 9) respectively mentioned the purpose as:

“To deliver quality services to communities by maximising the limited resources allocated to municipalities”. (Participant 4)

“To ensure adequate, effective, and efficient delivery of services to the public”. (Participant 8)

“To facilitate effective, efficient service delivery”. (Participant 9)

It is clear from these excerpts that participants are mindful of PFM being performed with the purpose of safeguarding public funds and to ensure the monies are used to deliver services to the people.

5.4.2 Enforce transparency and accountability

Apart from ensuring effective service delivery, some participants referred to enforcement of transparency and accountability as another PFM objective. The quotations below correspond with this.

“Transparent and accountable for the delivery of goods and services for all citizens”. (Participant 5)

“Purpose is to ensure that public finances are used effectively, economically, transparent, and accountable for the delivery of goods and services for all citizens”. (Participant 7)

5.4.3 Ensuring financial management compliance

There are laws and regulations in place to ensure compliance where public funds are concerned. Participant 9 mentioned the PFMA regulates financial management within municipalities. The PFMA ensures all government revenues, liabilities and assets are managed effectively and efficiently.

Participant 9 said:

“Prescripts as control measure, it promotes the responsible use of funds. PFMA”.

Sharing similar views, Participant 3 commented the purpose of financial management is “to ensure compliance with Municipal” control measures.

5.4.4 Prevention of misuse of funds

The primary objective of financial management is to avoid loss of funds and curtail fruitless expenditure within the government. This aligns with the views of Participants (3 and 4). When asked regarding the purpose of financial management, they respectively indicated the PFM objective as:

“To avoid financial mismanagement”. (Participant 3)

“To avoid irregular, fruitless, and wasteful expenditure”. (Participant 4)

Participant 1, interestingly, shared that financial management helps to detect system discrepancies.

“To detect and eliminate fraudulent activities with the system”.

Other participants shared that financial management is undertaken with the aim of ensuring effective and efficient expenditure. In this regard, Participant (5, 6 and 10) said, respectively:

“Purpose is to ensure that public finances are used effectively, economically”.
(Participant 5)

“The primary purpose of managing public finance in Municipalities ought to be an attempt to reduce the cost of finance, this by ensuring that sufficient funds are allocated to render services to its community they serve”. (Participant 6)

“To protect the resources of the purse and manage public funds effectively, efficiently and for economical purposes”. (Participant 10)

On the financial management purpose, participant 1 added it is to “Strengthen controls that will ensure efficient and effective utilisation of funds allocated to municipalities”.

5.5 BENEFICIARIES OF PUBLIC FINANCE AND RESOURCE MANAGEMENT

In every organization there should be beneficiaries, and the following information will report the results of what participants stated with regard to the beneficiaries of PF and resource management.

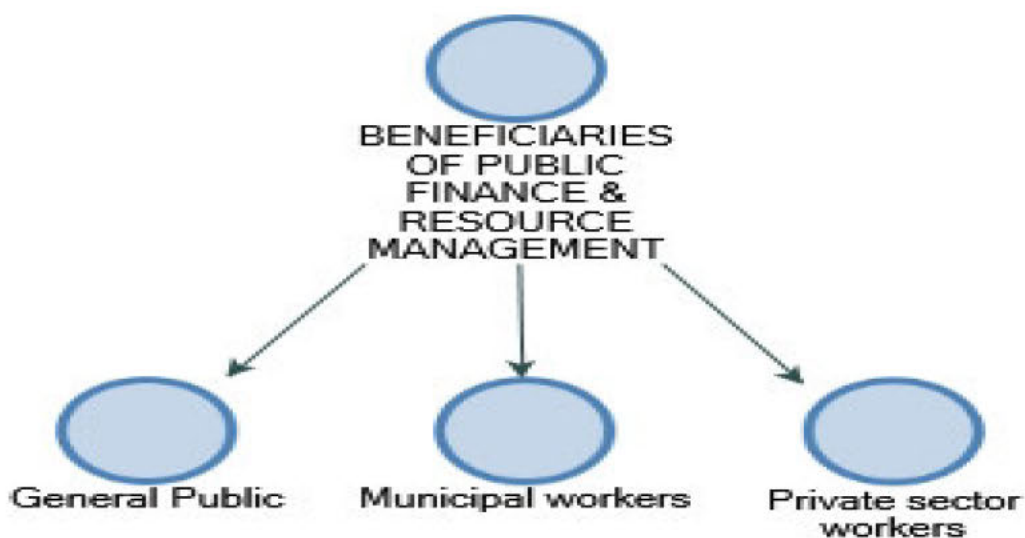


Figure 5.4: Tree diagram (beneficiaries of public finance and resource management)

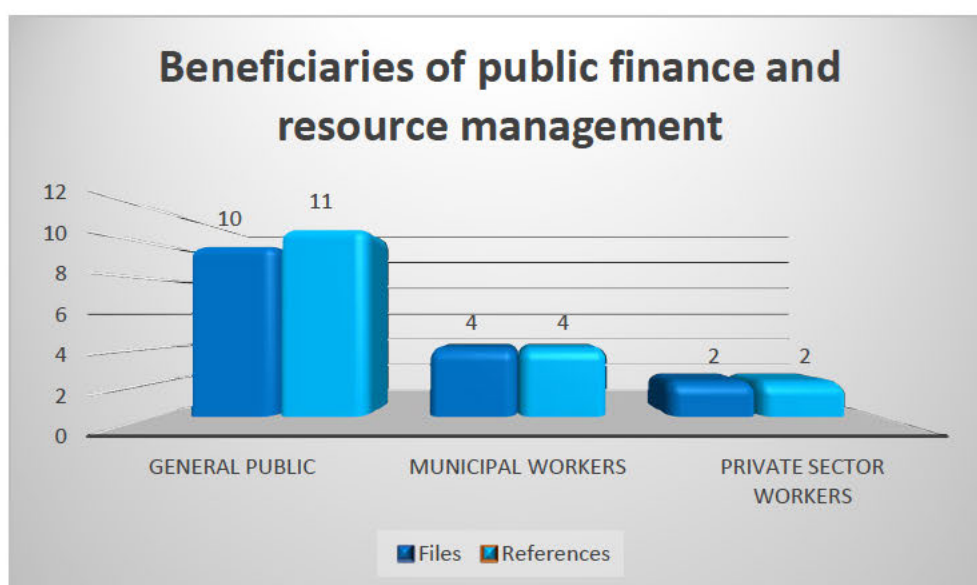


Figure 5.5: Beneficiaries of public finance and resource management

The results (Figures 5.4 and 5.5) indicate the general public should benefit from PF and resource management; this is accounted for by all 10 participants in the study, and inclusive of South African citizens, traditional institutions, communities, and taxpayers. Participant 6 stated:

“Well, I believe that the people or constituencies ought to be the clients or beneficiary of Public Finance, and it should serve their interest as they are expected to receive services from government”.

Of the 10 participants, four further believe Municipal workers should be beneficiaries. When prompted for a response, participants 5 and 7 responded in the same light:

“Workers, and pensioners are all beneficiaries of Public Finance Management, Parliament, Management” (Participant 5 and 7).

Participant 3 explicitly stated that “Municipal workers” should be the beneficiaries of PF and resource management. Furthermore, participants 5 and 7 asserted individuals from the “Private sector” should be beneficiaries. Figure 5.5 reflects who the participants in the study perceive as beneficiaries of PF and resource management, in percentages.

5.6 FINANCIAL MANAGEMENT EXPERTS

The different types of financial experts in the municipality are illustrated (Figure 5.6).

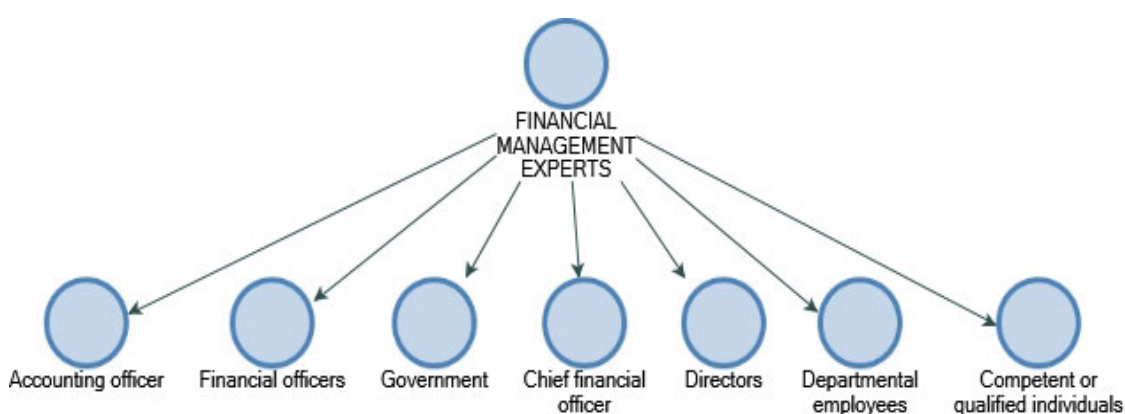


Figure 5.6: Tree diagram (Financial management experts)

The results (Figure 5.6) illustrate all individuals are considered a financial management expert in the commerce field. It can be noted four participants

indicated the financial management experts are financial officers and CFOs, respectfully. Only three participants stated the experts are accounting officers (Figure 5.7).



Figure 5.7: Financial management experts

5.7 COMPETENCIES REQUIRED FOR PROFESSIONAL FINANCIAL MANAGEMENT

For duties to be effectively and efficiently carried out, competent individuals need to be appointed within an organisation. Participants interviewed suggested the appointment of officials, recruitment of individuals with adequate experience, and officials with good leadership skills, are the most sought-after proficiencies.

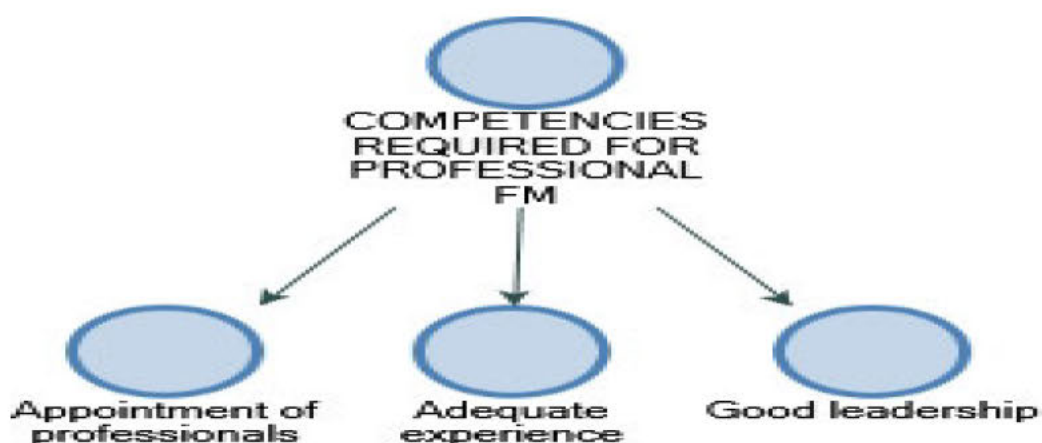


Figure 5.8: Tree diagram (Competencies required for professional financial management)

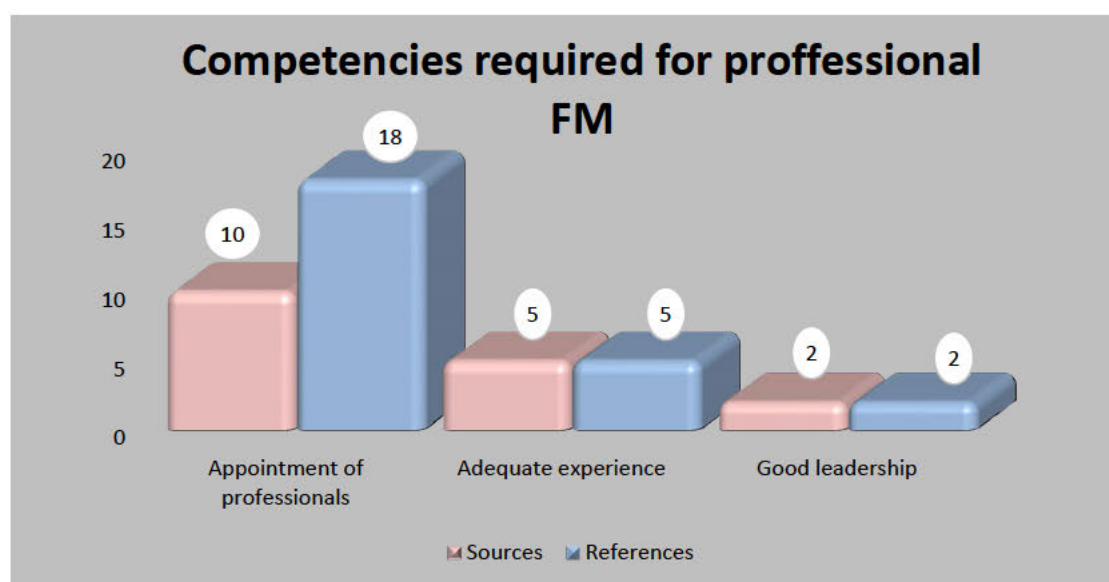


Figure 5.9: Competencies required for professional financial management

The most highlighted competency required within the municipality to prevent financial mismanagement is the appointment of professionals, with a show of 18 references (Figure 5.9). This is followed by recruitment of adequately experienced individuals, with five references.

It may be argued, for accounting specialists and general managers to efficiently carry out their duties, they need to have tailored skills and

qualifications that reflect their specialised roles. However, the data extracted from transcripts reveal issues related to financial mismanagement in local government. Hence, participants advocated that more deserving people with the required prerequisites should be employed to address issues related to financial mismanagement.

Participants maintained adequate experience would suffice and reduce waste expenditures. Supporting the above statement is participant 5, who stated a financial expert should be able to do appropriate financial planning, as well as making financial resources available and controlling the outflow, while adhering to administrative requirements.

Participant 5 alluded to the most needed competencies as:

“Financial Planning, Budget Execution and Control and Financial Reporting”.

Furthermore, participant 9 highlighted having financial planning expertise and the ability to make financial decisions are crucial skills for a financial analyst.

The participant indicated these skills to include:

“Financial planning skills, financial decision-making skills, which are in support of the department mandate”. (Participant 9)

Another necessary proficiency indicated by some participants, is to have someone with good leadership skills who ensures organizational vision and goals are met and takes responsibility for his or her actions.

“Ethical leadership is needed to address the inefficiencies of PFM”. (Participant 2)

Similarly, participant 6 added the most important of all the requirements is someone who is transparent and liable (accountable). The participant highlighted these aptitudes are not practised and the officials need to demonstrate these qualities going forward to minimise the financial challenges the municipality is faced with.

“Officials should ensure that accountability and transparency are seen as a mechanism to deal with impropriety in the province; those not involved want to see the combination of both”. (Participant 6)

The data extracted showed participants believe the appointment of professional officials as an important competence required to curb the misuse of funds within the municipality. Participants stated recruiting qualified individuals, who are known for and pride themselves in fulfilling the organisational mission, will ensure they do not mismanage organizational funds.

Similar sentiments are expressed by the following participants, who also suggested:

“Departmental learning academy, Internal Auditors, Auditor-General and learning institutions for financial management in the Public Sector”. (Participant 3)

“Recruitment of competent people”. (Participant 5)

“Only a professional individual or contracted professional service provider with a clear contract”. (Participant 7)

5.8 FACTORS CONTRIBUTING TO FINANCIAL MISMANAGEMENT

From the coding process, participants pinpointed a host of factors (Figure 5.10) influencing mismanagement of finances within the municipality. These included inappropriate budget planning; lack of monitoring system; non-adherence to the financial management laws; and poor delegation of duties; as well as recruitment of incompetent staff.

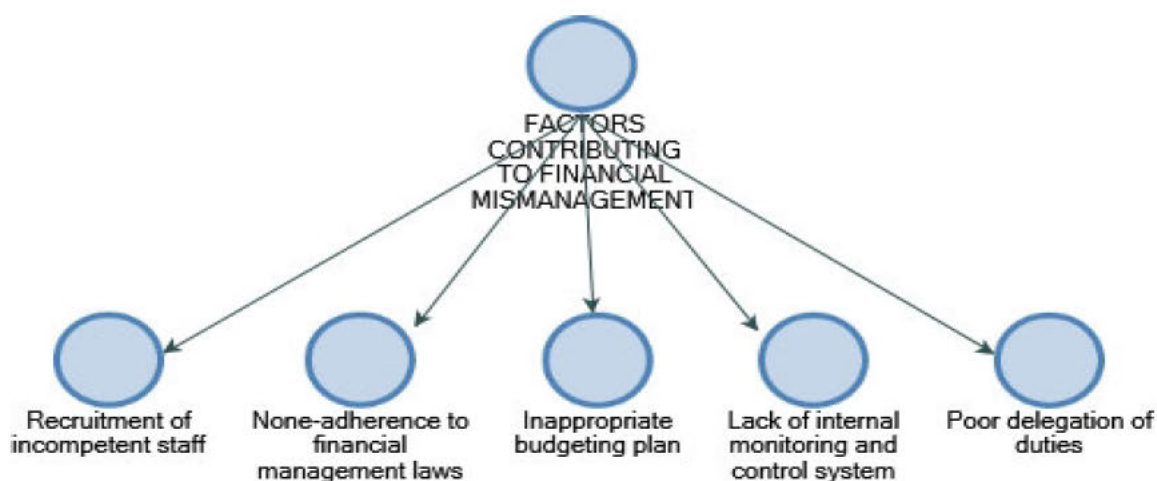


Figure 5.10: Tree diagram (Factors contributing to financial mismanagement)

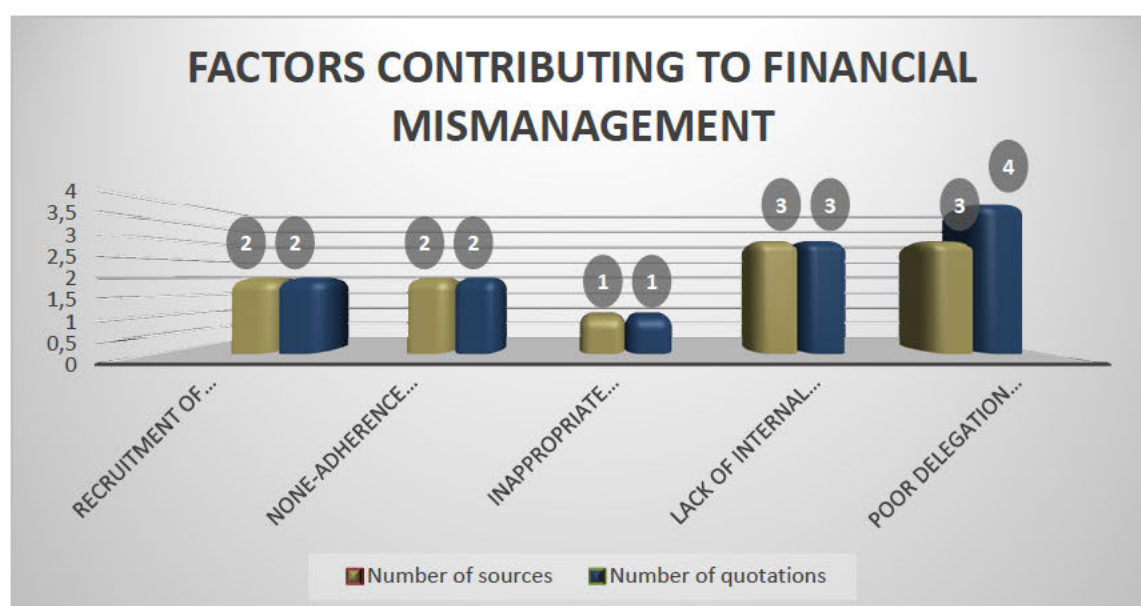


Figure 5.11: Factors contributing to financial mismanagement

5.8.1 Inappropriate budgeting plan

Participants mentioned ineffective budget planning negatively impacts financial management. Participant 3 highlighted that inappropriate planning led to fruitless expenditure of public finances:

“Inappropriate Budgeting, unrealistic procurement”.

5.8.2 Lack of monitoring control system

A monitoring control system plays a significant role in PFM as it detects discrepancies within the system. Participants mentioned lack of reporting and controls as a contributing factor to mismanagement of funds. The excerpts below concur.

“Lack of internal controls that can detect, reduce and eliminate mismanagement” (Participant 4)

“Lack of reporting and controls” (Participants 5 and 7).

5.8.3 Non-adherence to financial management laws

When participants were asked what factors they think contribute to mismanagement of funds, they mentioned lack of compliance with financial laws as one of the contributing factors. In this regard, Participant 3 identified: “Non-compliance with financial management prescripts like PFMA and other related regulations”.

Participant 1 also mentioned there is “misinterpretation of legislative prescripts” and this could be a reason for non-adherence to financial management laws.

5.8.4 Poor delegation of duties

MMs are known to have extensive municipal duties, having to oversee every operation within the municipality. Delegation of duties is crucial within the municipalities to avoid delays. However, participants in the study revealed delegation of duties is poor or non-existent. For instance, Participant 4 highlighted examples of this:

“Managers not segregating responsibilities within supply chain management”

In addition, Participant 7 added that:

“Lack of authority, no proper financial delegations to authorise and approve expenditures”.

5.8.5 Recruitment of incompetent staff

As suggested by participants, one of the major issues within local government is recruitment of individuals who do not qualify for the vacant positions, which is the same reality for KZN local governments. This is reinforced by Participant 1, who identified faults within the recruitment processes:

“Recruitment processes that do not produce suitable candidates for positions at supply chain management, finance and at senior management”. (Participant 1)

Participant 4 also commented on municipal recruitment of ex-convicts and the negative impact it has on the municipality’s image:

“Currently certain municipalities are able to employ officials who would have been offenders, with relative ease. This has a major contribution towards the decaying state of municipalities in the province. There is no law at present that enforces the registration of offenders in the municipal space. It is incumbent upon individual municipalities to report offenders to the National Department of COGTA who, in turn, develops a register of offenders” (Participant 4).

5.9 STAKEHOLDERS INVOLVED IN PFM

In ascertaining the relevant skills and knowledge required for the financial management of public funds, participants considered different experts and professional bodies as crucial in the execution of this task. As Figure 5.13 illustrates, it was stated that trained financial accounts specialists, CFOs, financial committees, and officials deployed by government, as well as treasury, political leaders and communities, are all involved in PFM.

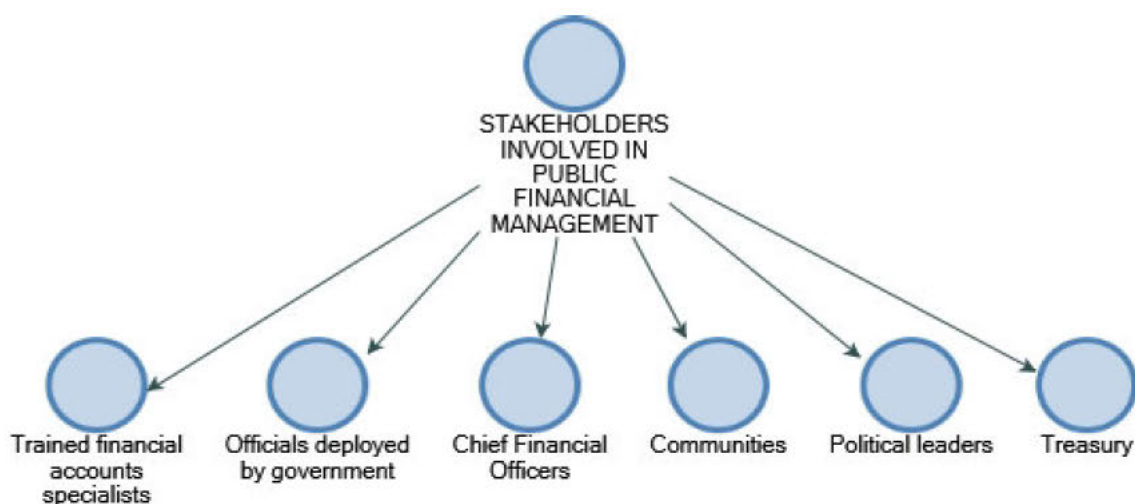


Figure 5.12: Tree diagram (Stakeholders involved in PFM)

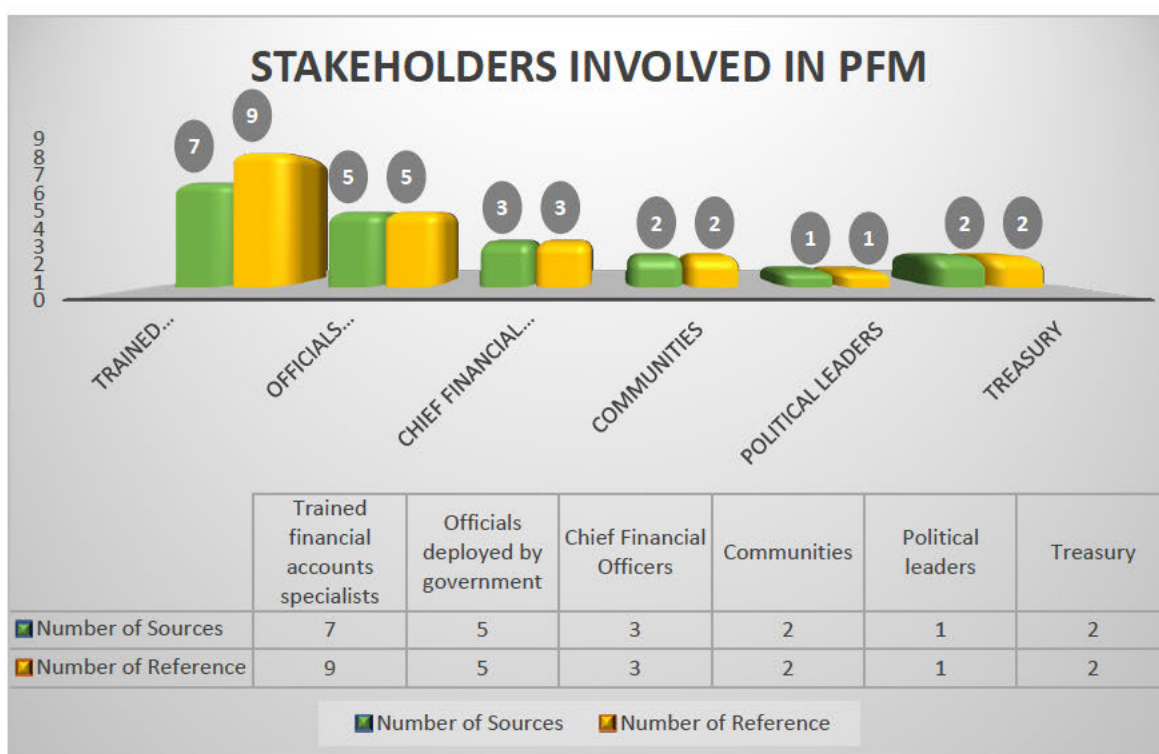


Figure 5.13: Stakeholders involved in PFM

Participant 8 exclaimed “the Treasury is the key decision-maker in the public financial management systems” and participant 10 held the same view.

Participant 9 highlighted several experts involved in this mammoth task; the participant explained this management starts from allocation of funds, all the way to distribution and the reimbursement of service providers.

“There are two levels, first is what to spend on and how much is allocated, as well as to monitor whether allocated funds are spent accordingly, in expenditure management based on the decisions, funds of the departmental vote on the budget. Accounting Officer, expenditure management, includes procurement, to payment of suppliers, that’s the responsibility of the Accounting Officer”.

Converging with this view, participants 2, 3, 4, 5, 6 and 8 listed trained professionals such as budgeting officers, auditors, accountants, and accounting officers, along with asset and liability managers, as well as financial managers.

Participant 6 noted “members of financial committees” as amongst those who have the relevant knowledge for this task.

Participants 4, 5 and 7 stated the expertise of a CFO as integral to the management of public funds.

“The Chief Financial Officer and the Programme managers all have a responsibility towards financial management and service delivery”. (Participant 4).

Officials deployed by government, such as those who work for different municipalities, and various government officials were said to be mandated to manage public funds, participants 4, 5, 7, 8 and 10 provided insurmountable evidence to this, stating:

“In terms of the Municipal Finance Management Act (MFMA) and Public Finance Management Act (PFMA), the Municipal Manager at the Local government” is responsible.

Participant 7 also included political leaders such as the “minister” and participant 5 said the “communities who are beneficiaries” are responsible for the management of public funds.

5.10 SYSTEMS IN PLACE FOR PROPER FINANCE MANAGEMENT

This section will focus on the systems in place to influence proper finance management in the municipality.

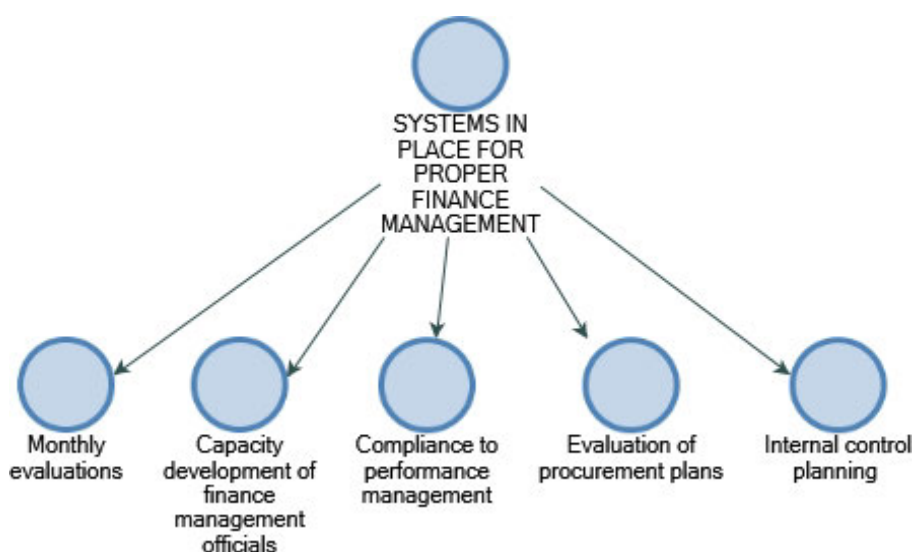


Figure 5.14: Tree diagram (Systems in place for proper finance management)

5.10.1 Capacity development of finance management officials

In every organization it is imperative to constantly develop officials for the betterment of the organization and capacitating individuals is the first step to achieving that goal. The majority of participants in the study shared similar views regarding how this could be achieved; which is for officials to be trained, to have their skills developed and to have programmes in places for officials to make use of and address the finance management inefficiencies.

Participant 6 stated when officials develop themselves, it aids them in their day-to-day work life:

“Officials should be properly trained and encouraged to undergo training and capacity development so that they can improve on their daily performances in order to address these inefficiencies”.

Furthermore, participant 1 reiterates the first point, stating which types of courses are available to officials that can be utilised in training:

“There are Ethics and Financial Management short courses for Senior Management that are offered by Human Resources through credible institutions and the National School of Governance aimed at capacitating managers.”

Most participants submitted that capacitating the development of officials indicates its importance in financial management and therefore, should be implemented, since it strengthens officials to make informed decisions.

5.10.2 Compliance with performance management

Keeping the performance of employees in check and continuously evaluated is imperative in every organization. Further consideration must be made when working with the public, and has to be an aspect that, in itself, propels officials to perform better in their work.

Participant 2 indicated the need for a performance management system in place for public sectors:

“Promotions and adhering to performance Management System within the public sector” (Participant 2).

The promotion of and adherence to the system create a conducive working environment and allow the public to benefit, because officials will try to perform and be as efficient and effective as possible.

5.10.3 Internal control planning

In every organization there is a need for internal control planning, crucial for company success and how it aims to achieve its goals, with having a set plan in place one of the most important aspects. This plan will show how and what decisions ought to be taken as a means to reduce risk in finance management.

Both participants 5 and 7 agree on the idea these measures should entail similar aspects.

“Measures are Planning, Internal Controls, Accountability, Reporting”.
(Participant 5 and 7)

Part of these measures can be accounted for in creating a budget, which allows for the departments to know how much money is being spent and on what. Participant 3 makes mention of “Department budget”, stating its importance as:

“Conditions are: Departmental spending pattern.”

Having a budget in an organization assists in ameliorating mismanagement of funds, because that implies every cent has been accounted for and the department is able track their expenditure in a sequential way. Moreover, documenting existing physical capital in the municipality is imperative, as there will be an estimate of all the company resources and how those are being utilised.

“Resources are financial records, gadgets like computers, Human Resources and Assets”. (Participant 3)

Moreover, participant 6 makes mention of other internal control measures in place:

“There are policies and procedures as well as templates available for assuming to be the guarantor of success in the provisioning of services. These procedures also outline who is responsible for making financial decisions”.
(Participant 6)

Lastly, another measure in place is the vetting of officials, which essentially allows the government to investigate as a means of verifying the suitability of candidates to be hired for the department. This reduces the risk of appointing an incompetent official, who will not make informed decisions or be unable to manage municipal finances.

“Provincial Government has a system to vet officials prior to being appointed. Findings of the vetting determine the eligibility of the candidate to be appointed”. (Participant 1)

These measures in place aid in risk mitigation in the department. Departmental budgets, policies, as well as vetting systems, therefore, act as internal control measures when attempting to obliterate financial mismanagement in the department and pave the way for better decision-making by officials and government.

5.10.4 Evaluation of procurement plans

It is crucial to assess how the municipality plans to procure deliverables, which is itself an indication of what is worth acquiring. Furthermore, the development and approval of these plans should be made by capacitated individuals, allowing officials to make better decisions in relation to the department.

“In the case of the KZN Department of COGTA, the procurement plans are developed by program managers and approved by the Accounting Officer, which ensures that key deliverables are linked to the mandate of the department. The procurement plans must be aligned to the Annual Performance Plan of the institution which ensures that funds are spent within the confines of the mandate of the...” (Participant 4)

5.10.5 Monthly evaluations

Once procurement plans are implemented, there needs to be constant monitoring to determine whether these plans are doing what they are supposed to do. This is where the introduction of monthly evaluation comes in

to play, while it is also imperative in assessing expenditure during the month; which, in turn, makes you knowledgeable about what occurs during the month and whether there is a need for things to change. Participant 1 makes mention of this:

“Reports from Finance, Internal Control and Legal services are a standard item for monthly Management Committee meetings (Manco) and Executive Committee meetings (EXCO) which assists in detecting anomalies in the system, as well as developing necessary mitigation strategies to reduce and or eliminate risks.

“There are monthly In Year Monitoring (IYM) reports that are signed by the CFO and the Head of Department which assists in tracking the expenditure of the department. Frequent (Monthly or as and when necessary) budget meetings with program managers are convened to discuss expenditure to avoid over/under expenditure of the allocated budget”. (Participant 1)

Participant 1 states what they do and the importance of doing, with participant 5 reiterating this:

“Authorizing expenditure, Monitoring & Evaluation systems”. (Participant 5)

5.11 PENALTIES FOR MISMANAGEMENT OF PUBLIC FINANCES

Every individual found guilty of defrauding the organization will face consequences according to participants, who further shared when there is misuse of funds within the municipality, there will be delays in executing certain responsibilities, resulting in poor service delivery, with increased public protests and bad municipal credit profiles. Participants stated the institution will enforce disciplinary actions against anyone found guilty.

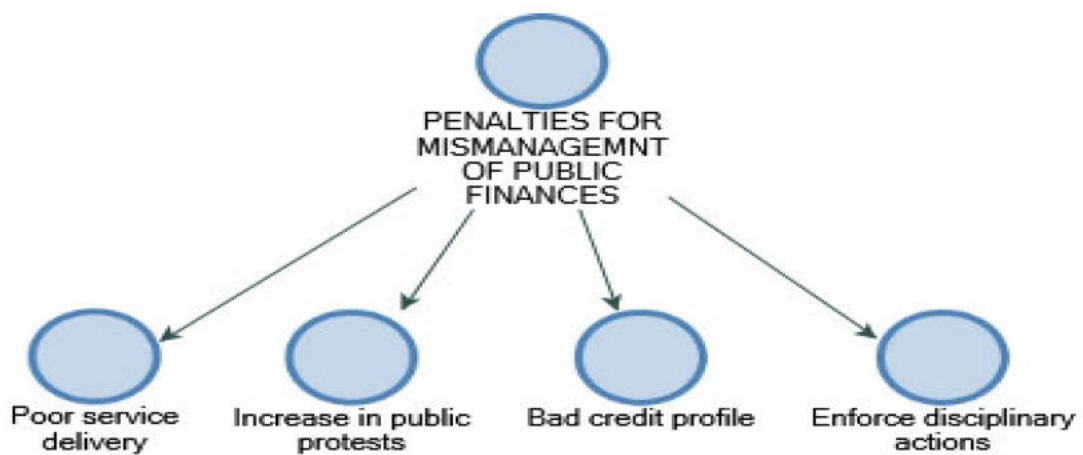


Figure 5.15: Tree diagram (Penalties for mismanagement of public finances)

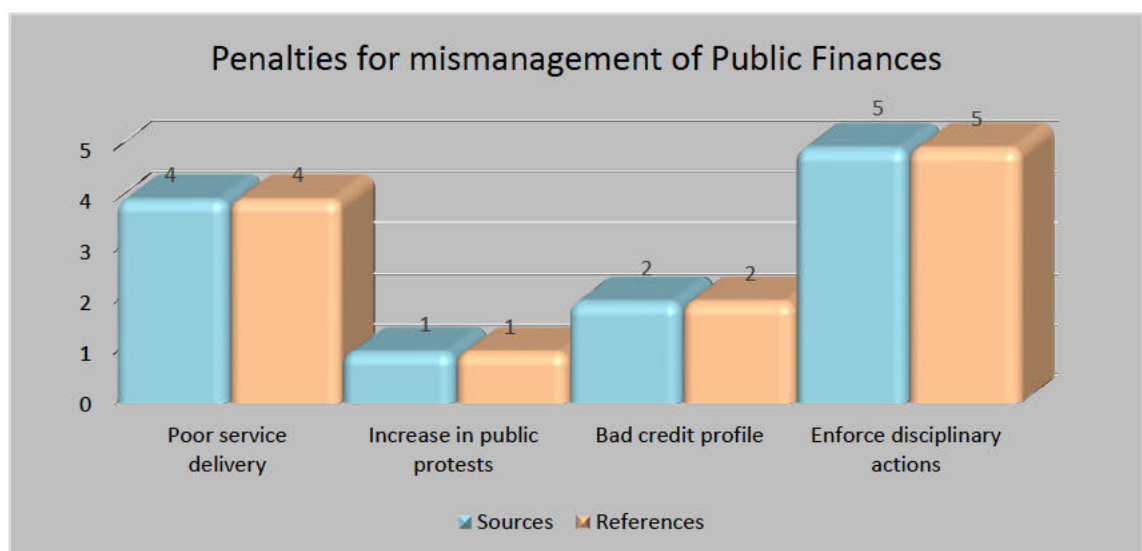


Figure 5.16: Penalties for mismanagement of public finances

Enforcing disciplinary actions is shown (Figure 5.16) to be the most important measure employed when municipal officials break the law, with five references. Poor service delivery was also highlighted as a consequence of financial mismanagement, with four references.

When participants were asked regarding the consequences of financial mismanagement, they mentioned individuals with poor financial management skills overspend and live on multiple credit cards, unable to pay back their

debts. Consequently, they are blacklisted and have a bad credit profile. This is similar to when the finances of a municipality are mismanaged:

“Increasing debt to pay for creditors and debtors and salaries. Inability to borrow money by government. Bad credit profile”. (Participant 5)

Reprimanding officials (enforce disciplinary measures) in response to their misconduct is another measure implemented by municipalities to address criminal activities.

“There ought to be grossly disciplinary measures in place, so that those involved in the corruption events should face the full might of the law. Disciplinary committees ought not to be lenient to those who committed criminal activities”. (Participant 6)

In addition, enforcing disciplinary measures ensures effective management, which makes it crucial to enforce these measures to prevent transgression recurrence.

“Disciplinary measures for preventing the recurrence, ensure corrective action, as well as punitive, where necessary”. (Participant 8)

In support, participants 9 and 10 respectively explained:

“Accounting is to institute consequence management against those that are guilty of floating the ACT, over and above, if the accounting officer has the obligation to report to law enforcement agencies. Disciplinary Procedure and sanctions depend on the severity of the Law needs to apply”. (Participant 9)

“Disciplinary actions need to apply to those who are found to have committed a crime, and harsh measures needs to apply so that we eliminate the mismanagement of funds within department”. (Participant 10)

Conviction as a means of disciplinary measure is one of the other consequences participants mentioned because of misuse of finances. They also pointed out there are officials at the level of KZN COGTA department who are in jail, because of efforts by the Department to combat fraud and corruption.

Where officials misuse municipal funds poor service delivery is the result, with general government services failing due to the decline of resources, leaving the public jobless and living in poor conditions.

Participant 3 highlighted the association between:

“Poor Service delivery, Unnecessary over-spending”.

Participant 7 supported the above sentiment and stated:

“Consequences are decline in service delivery”.

Challenges followed by financial mismanagement within municipalities give rise to public protests, confirmed by participant 3 noting:

“High volume of community protests” due to financial mismanagement.

5.12 LEADERS IN DEFENCE OF PUBLIC INTEREST

The ensuing section explores who the leaders are in defence of public interest; that is to say, the actors deployed to monitor the use of public funds and hold those entrusted with its management accountable. As illustrated (Figure 5.17), these are the Chapter 9 Institutions, civil society, and public officials. The analysis revealed the responsibility of these stakeholders in ensuring accountability of the financial management of public funds. Through this, we observed the following:

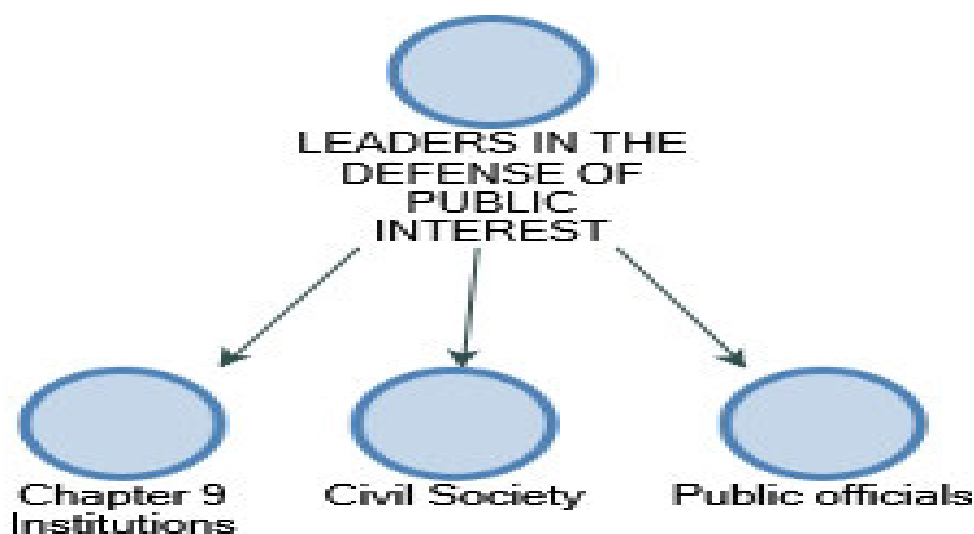


Figure 5.17: Tree diagram (Leaders in defence of public interest)

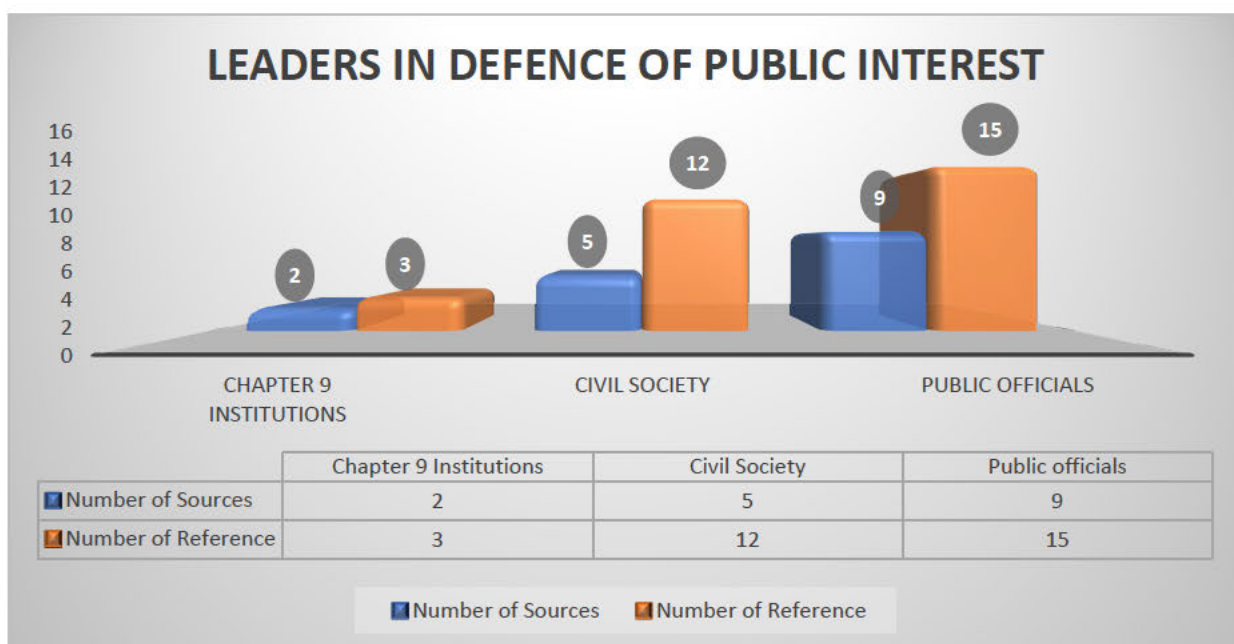


Figure 5.18: Leaders in defence of public interest

Participants referred to public officials being leaders in the defence of public interest in 15 references, as illustrated (Figure 5.18) and to Chapter 9 institutions through three references.

The legitimacy of Chapter 9 Institutions, such as the Public Protector and the AG, lies in their ability to hold public officials accountable for the use of public funds in their various capacities. Participant 1, 3 and 8 noted these stakeholders have to secure the public from the acts of those responsible for the financial management of public funds.

Insurmountable evidence cemented the legitimisation of Civil Society as leaders in ensuring no misuse of public funds. Participants acknowledged citizens and communities, beneficiaries of public funds, the media, and traditional leaders, as well as public committees, and organised public interest groups amongst civil society members who are defenders of the public interest. Participant 6 encapsulated this by adding that “all citizens in the province are legitimate stakeholders”.

Moreover, participants 2, 3, 4, 5, 7, 8 and 10 noted public officials as comprised of leaders required to account for public funds expenditure. Participant 6 explained:

“[...] there are also legitimate structures such as councillors, ward committees and the likes, who by law are mandated to speak on behalf of those that do not receive services. In SA the voting of representatives enables those elected to serve as legitimate stakeholders in addressing all issues affecting communities”.

These public officials include municipal employees, the ministry of COGTA, with participant 2 adding “Provincial Government in the case of COGTA”. Participant 4 agreed, expressing the mandate of these officials:

“The COGTA Portfolio committee as well as the Standing Committee on Public Accounts (SCOPA). Both these committees are established by the Legislature as a key parliamentary tool for advancing accountability. The committees are also established to represent the interest of the public by ensuring that state funds are used for intended purpose”. (Participant 4)

5.13 RECOMMENDATIONS

The data extracted from interviews showed respondents acknowledge several financial management challenges; various recommendations were made to purposefully address these challenges. These recommendations suggested the following: Adequate allocation of resources, good governance, proper planning and monitoring of funds, as well as adherence to policies and recruitment of competent staff (Figure 5.19).

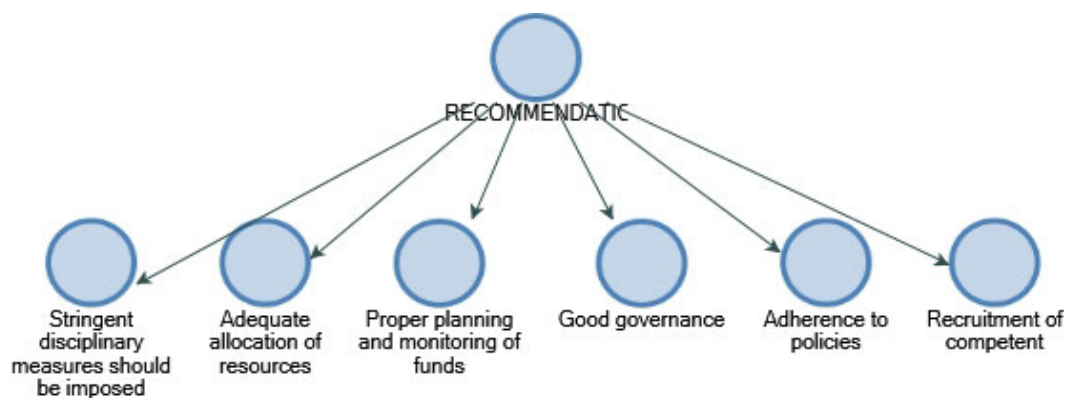


Figure 5.19: Tree diagram (Recommendations)

For officials to efficiently execute their daily duties, adequate resources need to be available. Participant 2 advocated that availability of adequate resources would really help government officials to serve the public well.

“There should be appropriate allocation of resources within our departments”.
(Participant 2)

Two participants recommended that good governance could also help improve the current situation municipalities are struggling with. The government should be able to respond to not only organisational turmoil but also to societal grievances, by providing appropriate solutions, justifying the public’s trust by remaining transparent and ethical.

Participant 2, 6 and 9 expanded on this:

“Not to betray the trust the public places in them”. (Participant 2)

“The measure of success ought to be determined through good governance and ethical aspect should be served as a way for improvement that lead to successful implementation of public financial management”. (Participant 6)

“Political Administration, and clear role of responsibilities between the political arm of government and other will be strong civil society that hold government on the use of funds. Respect for the rule of law by all stakeholders, for conduct. Independent and incorruptible, nobody is above the law”. (Participant 9)

Participant 6 further recommended proper planning and monitoring of funds should be applied in local government to diminish misuse of finances and improper budgeting:

“There should be solid and proper planning, organizing, controlling and monitoring of funds that will eventually address financial rot in the province”.

An additional suggestion brought to the fore by participants was the need to adhere to policies. Following organisational principles and regulations is crucial, because those policies are there to guide how things should be dealt with and executed. Participants strongly suggested officials should adhere to policies, especially with regard to budgeting, as every cent should be spent according to specifications. Participant 9 and 10 respectively stressed that:

“Spending accordingly with policy imperatives of government prescripts, e.g., to facilitate economic Black Economic Development, e.g., Budget”.

“The decision-makers must ensure that policies are adhered to at all., times”.

Data provided in the study revealed that if the financial management officials could recruit competent staff, the level of irresponsibility in the accounts or finance department would reduce and accountability will improve.

“Recruitment of competent people, authorising expenditure, Monitoring and Evaluation systems”. (Participant 7)

In addition, it was suggested officials found guilty of any criminal acts should be punished before the individuals or their actions can influence others.

“Disciplinary measures must be imposed to those who have found to be guilty. Batho Pele, is a simple and transparent mechanism which allows citizen to hold public servants accountable for the level of service delivery”. (Participant 2)

5.14 CONCLUSION

Data analysis paved the way for creating the components that inform the aspect of systems thinking. As is required with designing systemic intervention, there is need for rigorous study of the parts that make up the system under study; facilitated by data collection and analysis. Systems thinking helped the study to understand the complex world of PFM in municipalities. Hence most points discussed in the analysis of data, adequate resource allocation, good governance, and proper planning, as well as monitoring of finances, adherence to policies, and recruitment of skilled employees, denote system components. Hence, my preparation of a systems thinking frame is my reference. The next chapter goes on to address the construction of underlying structures and identification of archetypes.

CHAPTER 6

SYSTEMS ARCHETYPES AND APPLICATION OF SD MODELS

6.1 INTRODUCTION

This Chapter presents the systems archetypes developed from themes and sub-themes that arose from analysis of the data from interviews. Themes and sub-themes were used to establish connections between variables, either established or known, and those that existed but not considered. The initial phase consisted of identifying single CLDs that depict cause and effect. These were further developed in larger underlying structure diagrams, where an archetype was then deduced, with subsequent behaviour of the archetype explained. Table 6.1 below depicts the seven themes emanating from data coding.

Table 6.1: Main Themes

Theme 1	Beneficiaries of Public Finance and Resource Management
Theme 2	Objective of Managing Public Finances
Theme 3	Factors contributing to Financial Mismanagement
Theme 4	Penalties for mismanagement of Public Finance
Theme 5	Systems in Place for Proper FM
Theme 6	Leaders in the defence of public interest
Theme 7	Stakeholders involved in PFM

Each theme (Table 6.1) was divided into sub-themes, which then informed CLD formation for each theme. The **CLDs** were then merged to form the larger underlying structure, where the systems archetype “tragedy of the commons” was then identified. Each causal loop structure represents an underlying behaviour, which is then explained for each.

6.2 STRUCTURING THE PROBLEM USING CLD

Table 6.2: Sub-themes- PF and Resource Management

Public Financial Management
General Public
Service Delivery
Municipal Employees
Private sector Employees

Table 6.2 presents the sub-themes diagram, comprising PFM, general public, service delivery, and municipal employees, as well as private sector employees. These themes will be created using CLDs, with the aim to see the connection between arrows.

6.2.1 Theme 1- Beneficiaries of PF and Resource Management Causal Loop

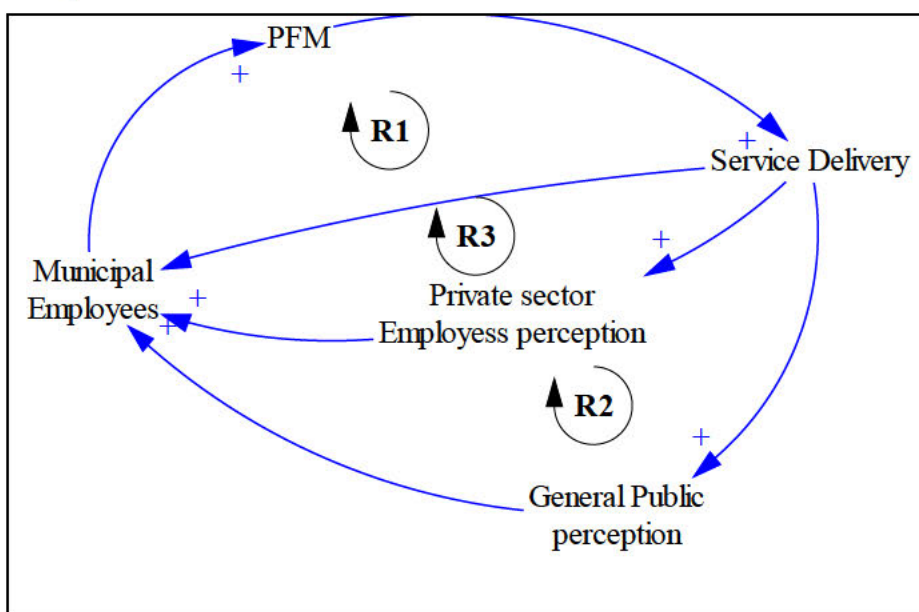


Figure 6.1: CLD Beneficiaries of PF and Resource Management

It is illustrated in figure 6.1 that with an increase in **transparency** and **accountability** in **PFM**, there is an improvement in **service delivery**. As service delivery improves, the **general public perception** towards municipalities also improves and will, in turn, motivate the **municipal employees (R2)**. An improvement in **service delivery** also improves **private sector perception** towards the council, thus, contributing to the private sector paying their bills in time. All this will improve PPP that will, consequently, motivate **council employees** to perform better; therefore, further improving on **PFM (R3)**. Furthermore, an increase in **PFM** will result in an improvement in **service delivery**, which has the effect of **motivating municipal employees (R1)**. Over time, this underlying behaviour has three reinforcing loops, showing it can be capitalised on, should municipalities want to improve their corporate image and the way they conduct business with the public and private sectors. The difficulty here, will be a process of improving PFM with the aim of increasing and improving service delivery. Municipal employees are a key lever to this process, hence, issues to do with their welfare and availability of work enablers (equipment) are key for service delivery improvement.

Table 6.3: Sub-themes- Managing public finance

Prevention of misuse of funds
Prevention of efficient expenditure
Ensuring financial management compliance
Effective service delivery
Enforce transparency& Accountability

Table 6.3 above represents sub-themes on managing PF, which include the prevention of misuse of funds, prevention of efficient expenditure, ensuring financial management compliance, and effective service delivery, as well as enforced transparency and accountability, these five sub-themes will be presented as themes converted to CLDs. It also points to contributing factors

in financial mismanagement. These sub-themes are the prevention of misuse of funds, prevention of efficient expenditure, with misuse of funds as a dominant factor.

6.2.2 Theme 2- Managing public finances CLD(R2)

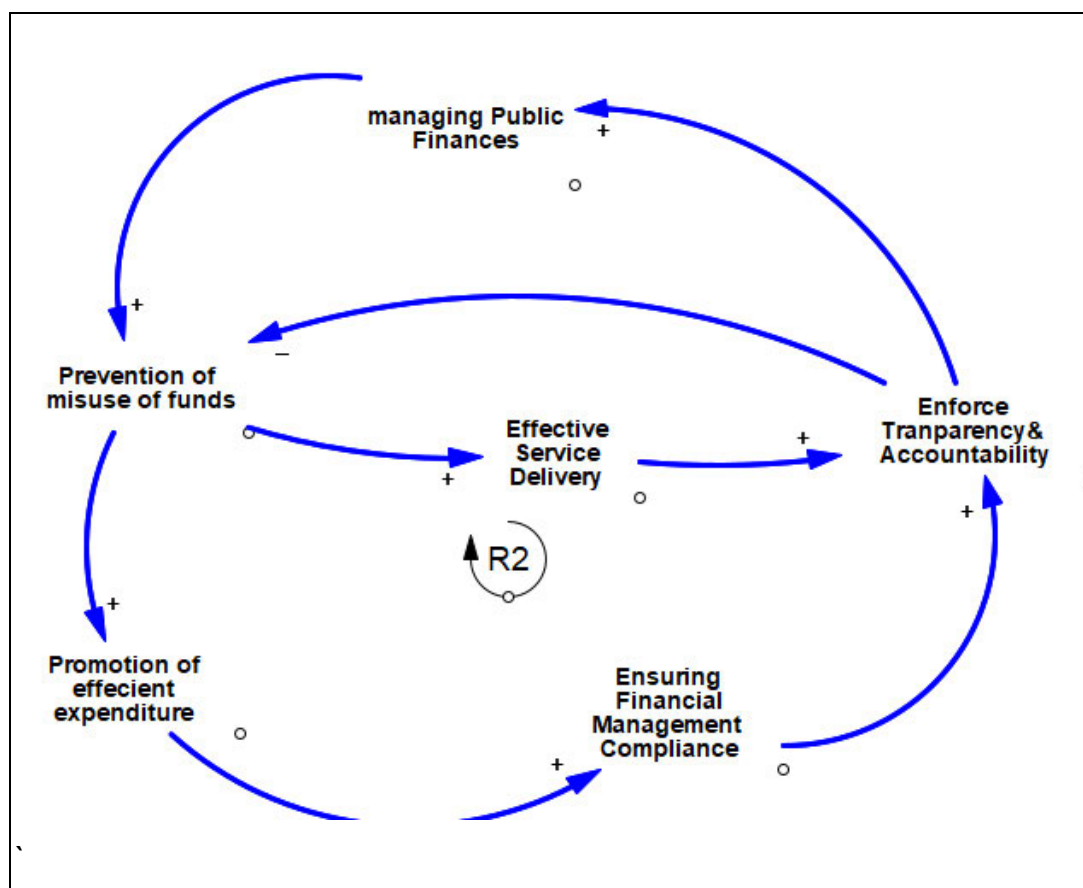


Figure 6.2: Managing public finances CLD

Figure 6.2 also shows the variables that participants are aware PFM is undertaken with the goal of safeguarding public monies and ensuring their use to provide services to the people. Transparency and accountability must be enforced. Aside from providing successful service delivery, some participants mentioned guaranteeing openness and accountability is another goal for PFM.

The inter-connection of variables regarding managing PF and service delivery are illustrated in figure 6.2. From this diagram, it can be deduced one of the

most important PFM goals is to ensure municipal governments are free of corruption. The diagram shows an increase of effective service delivery (R2) as the enforcement and transparency and accountability increases. This, in turn, increases promotion of efficient expenditure, while there was also a noticed increase in the prevention of misused of funds. Financial management compliance further shows some increases concerning the prevention of money laundering, and encouraging efficient spending and high-quality service provision. Regarding the goal of financial management, divergent viewpoints prevailed, with the primary goal of PFM identified as effective service delivery.

The objective is to ensure public funds are used “efficiently, economically, transparently, and accountably to ensure that goods and services are delivered to all citizens.” Participant 4 stated ensuring financial management regulations are followed is more imperative, with laws and regulations in place to guarantee public funds are used responsibly.

The PFMA oversees financial management within municipalities, according to Participant 6 who stated: “The PFMA assures that the government's revenues, liabilities, and assets are all managed properly and efficiently-

“Prescripts as a control measure supports the proper use of finances”.

These participants expressed sentiments identical to the previous participants, stating the goal of financial management is to “ensure compliance with municipal regulations.”

Further to this, **Money-laundering prevention:** The basic goal of financial management is to keep the government from losing money and wasting resources. This is in line with the view expressed by Participant 6. When asked what they thought the aim of managing finances was, participants (2, 3) said: “In order to prevent **financial mismanagement.**” (Participant 2) “To avoid sporadic, ineffective, and wasteful spending”.

Participant 3 mentioned finance management aids in the detection of system inconsistencies. “To use the system to detect and remove fraudulent

behaviour” According to other participants, financial management is done with the goal of assuring effective and efficient spending. In this regard, these participants were in agreement with this narrative.

Table 6.4: Sub-themes- Contributing to financial mismanagement

Contributing factors to financial mismanagement
Recruitment of incompetent staff
Non-adherence to financial Laws
Inappropriate budget Plan
Lack of internal control system
Poor delegation of duties

Table: 6.4 above shows the sub-themes namely; recruitment of incompetent staff, non-adherence to financial laws, inappropriate budget plan, and the lack of internal control systems, along with poor delegation of duties, and indicate factors contributing to financial mismanagement. These six sub-themes were translated to a CLD archetype and expressed using arrows, as shown in figure 6.3 below.

6.2.3 Theme 3- Factors contributing to financial mismanagement (R3)

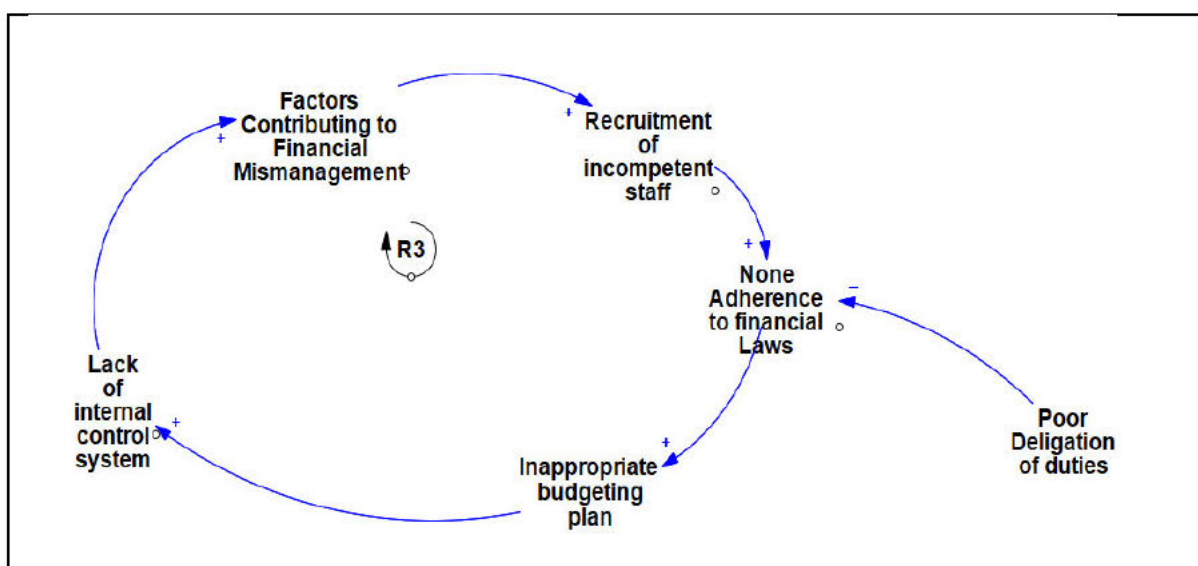


Figure 6.3: CLD Factors contributing to financial mismanagement

Figure 6.3 shows the re-enforcing variation (R3) of factors that contribute to financial mismanagement. The arrows suggest when there is increase in financial mismanagement factors, then incompetent staff increases non-adherence to financial laws. In addition, the lack of internal control increases when there is non-adherence to financial laws. While poor delegation of duties decline as a result of inappropriate budget planning, recruitment of incompetent staff and non-adherence to financial laws were seen as contributing factors to financial mismanagement. Furthermore, ineffective budget planning, according to the participants, has a detrimental impact on financial management. Participant 3 pointed out poor planning resulted in wasteful spending of public funds: "Improper budgeting, irrational procurement."

The absence of a monitoring and control system

A monitoring control system is important in PFM, since it detects anomalies in the system. Participants pointed to a lack of reporting and controls as a factor in money mismanagement.

The following excerpts support this claim.

"Inadequate internal controls for detecting, reducing, and eliminating mismanagement"

"Lack of reporting and controls" (Participants 5).

Non-compliance with financial management regulations

The Department (COGTA) always strives to comply with all legislation, including the PFMA requirements. As a result, all 28 statutory reports were produced and submitted to Provincial Treasury by the stipulated deadlines. This helped to monitor the Department's financial performance. In order to ensure suppliers are paid in 30 days, as per SCM requirements, 98 percent of suppliers are paid within the set period, with 98.5 percent achieved in

implementation of the Procurement Plan. To address weaknesses in accountability in relation to movable assets, quarterly verifications are conducted, within all 17 Departmental buildings and 257 Traditional Administrative Centres, while 267 Traditional Councils are supported, to implement the financial management practice notes.

There has been improvement by COGTA, from receiving a Qualified Audit Opinion in the 2017/18 financial year, to receiving an unqualified opinion for the 2018/19 financial year. The Clean Audit Committee, chaired by the accounting officer, will continue to sit fortnightly to deal with financial and non-financial matters that could adversely impact the audit outcomes. The audit improvement strategy for 2018/19 was updated and monitored by the Departmental Internal Control Unit to determine whether the action plans, as reflected in the audit reports, were implemented by risk owners/management.

The Department obtained an unqualified audit opinion on Vote 11; a clean audit on the Traditional Levies Account in the 2018/19 Financial Year.

To recap, the Auditors Report (2018/2019) stated:

“[...] there was little change in the province KZN's audit outcomes, leadership accountability was not sufficiently practiced and implemented, and essential controls continued to fail. Most district municipalities struggled with basic financial and performance management processes, showed a lack of responsiveness in implementing and monitoring action plans, and had inadequate governance structures that prevented effective accountability. Leadership did not always influence effective internal control structures to encourage good governance and discipline”.

A greater emphasis on exercising political oversight and meeting citizen expectations is required. The consequence of this can be seen in the rising

irregular expenditure recorded for the review period, with eThekweni Metro accounting for the majority.

A follow-up report on inappropriate expenditure was attributed to audits completed after the report's deadline. While officials were in place to execute these responsibilities, consultants continued to be used in many instances to assist with the creation of financial statements and financial reporting, with the province spending a total of R95 million in this area (AG Report 2018/19).

“Municipalities were assisted in complying with local government legislation and policies, as well as the Municipal Systems Act rules, by the Department. Traditional leaders are allowed to participate in municipal council meetings under Section 81 of the Municipal Structures Act in order to encourage joint decision-making on service delivery and development programs that affect traditional communities”.

The Department assisted towns in increasing traditional leaders' participation at the municipal level. Effective integrated planning is essential for the smooth operation of local government institutions and the rapid delivery of services.

COGTA facilitated the formation of legally compliant IDPs by effectively and efficiently managing the Provincial IDP Management and Support Plan, which aimed to act as a catalyst between Community-Based Plans and IDPs.

Table 6.5: Sub-themes- Penalties for mismanagement of PF

Enforce Disciplinary actions
Poor service delivery
Increase in protests
Bad credit profile

Table 6.5 above highlights sub-theme four, which focuses on the enforcement disciplinary acts, poor service delivery, an increase in protests that resulted in a bad credit profile for all department within the public sector, shown as sub-themes presented above.

6.2.4 Theme 4- Penalties for mismanagement of PF (R4)

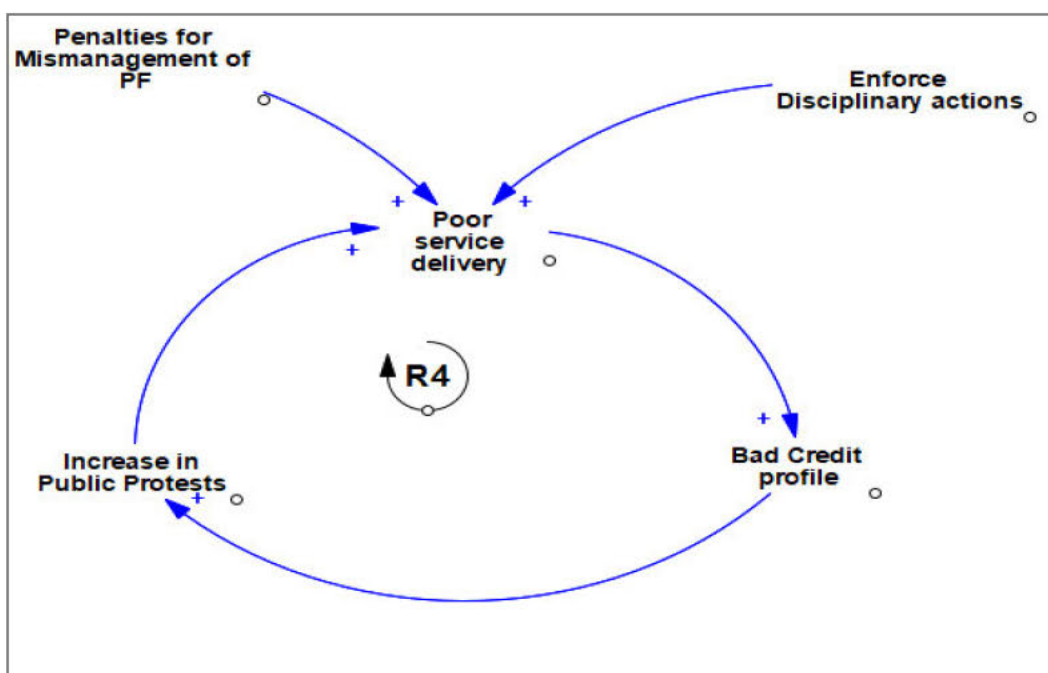


Figure 6.4: CLD Penalties for mismanagement of PF

The inter-connection of variables regarding the views on penalties for mismanagement of funds are demonstrated in figure 6.4. The increase in

public protests (R4) also has a bearing on an increase of poor service delivery and a bad credit. Participants furthermore, stated when money is misappropriated inside the municipality, there would be delays in carrying out specific obligations, resulting in poor service delivery, and bad municipal credit ratings. Participants shared when someone is found guilty, the institution will take disciplinary measures. For successful service delivery, the Department buttressed its commitment to ensuring municipal IDPs and sector plans are in sync. COGTA assisted all 54 municipalities in revising their adopted IDPs for 2019/20 in accordance with the MSA legal obligations.

The assessment findings were coordinated by the Department with the goal of improving sectoral coordination of provincial and national priorities. In addition, COGTA held alignment meetings to improve sectoral coordination and alignment in municipal and provincial planning instruments. IDPs were evaluated to ensure they were in line with the DGDPs and Departmental Sector Plans, and addressed the 6th Administration's priorities. Through Municipal IDPs, the Department is constantly developing Social Cohesion programmes in collaboration with the Interfaith Sector, Municipalities, and Traditional Leadership to address social ills in Municipalities.

Fraud, corruption, and poor administration stifle and obstruct service delivery in general. Efforts are undertaken every year to combat this problem. The Department is stepping up efforts across the province to prevent, investigate, and resolve cases of fraud, corruption, and maladministration, in partnership with key stakeholders and other law enforcement agencies. COGTA supported and oversaw the implementation of anti-corruption measures in all 54 municipalities as part of these efforts. On a quarterly basis, the Department assesses the extent to which anti-corruption measures have been implemented, informs municipalities regarding the nature and extent of support offered, and plays a significant role in implementing the Provincial Anti-Fraud and Anti-

Corruption Strategy. All 54 municipalities' Fraud Risk Registers were also examined.

Table 6.6: Sub-themes- Systems for proper finance

Monthly Evaluations
Capacity development
Compliance to performance management
Evaluation of procurement plans
Internal Control Planning

Table 6.6 shows the sub-themes number five for monthly evaluations, capacity development, with compliance to performance management, evaluation of procurement and internal control planning.

6.2.5 Theme 5- Systems in Place for Proper finance (R5)

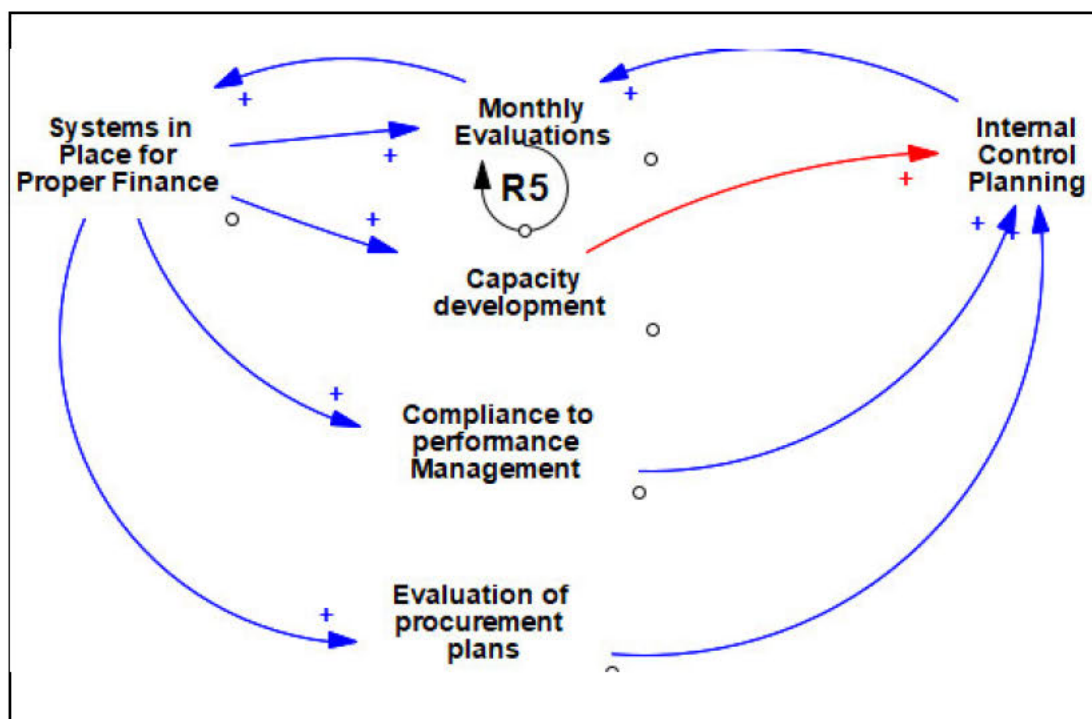


Figure 6.5: CLD Systems in Place for Proper finance

Figure 6.5 indicates the inter-connection of systems in place that ought to be available within the municipality. There is an increase in capacity development (R5), which leads to increased compliance with performance management. This escalates issues of monthly evaluation, capacity development, compliance to performance management, as well as **evaluation of procurement** plans, cited as those sub-themes critical within municipalities. COGTA developed anti-fraud and anti-corruption initiatives, as well as Internal Audit Improvement Strategies and **fraud investigations**. In addition, eight Risk Management Workshops were held to improve governance institutions' responsibility. Monthly audits were additionally done to guarantee proper application of the Standard Operating Procedures (SOP) and eradicate any disparities in dealing with the Izinduna payment difficulties. Workshops on the policy of whistleblowing and the execution of the **Anti-Fraud and Corruption Strategy** were also held. Furthermore, the report on Fraud Red Flags was examined after the risk assessment on **Ethics and Corruption Risk Practices** was completed.

Municipal planning is essential for making decisions about service delivery and long-term growth. To encourage **citizen participation** in municipal decision-making, the Department worked with all 44 local governments to connect their Ward-based Plans with their respective IDPs. COGTA also helped to organise 10 District Traditional Leadership and Interfaith Forums across the province, with the goal of coordinating interfaith efforts to promote social cohesion and nation building.

The Department assisted 12 municipalities in implementing the Strategic Framework, including providing and leading seminars on the Delegations framework, MPAC Terms of References, Municipal Oversight Guideline, and Roles and Responsibilities. In addition, 13 municipalities received hands-on assistance to increase oversight capacity through functional

oversight frameworks. Capacity development was cited as a delay where compliance with performance management is concerned. The implementation of Local Government Legislation is important for **good governance**.

COGTA assessed all 54 municipalities on their compliance with the Municipal Systems Act, Municipal Structures and MFMA. As a result, the Department supported approximately 18 municipalities to comply based on the support plan. Furthermore, COGTA monitored all 54 municipalities on the implementation of recruitment, leave, overtime, delegations, as well as municipal S&T policies. The by-laws are helpful in maintaining law and order in the municipalities; as a result, the Department drafted and gazetted five by-laws during the financial year. These by-laws are as follows: Cemeteries and Crematoria, Credit Control, Environmental health, and Municipal Parks, as well as Recreational Grounds, and the Sewerage by-law.

The Department supported all 54 municipalities to comply with **MSA Regulations** on the appointment of senior managers and on the implementation of the Gender Policy Framework, through an assessment of the organisational structures and new appointments for senior management municipal officials. Implementation of the National Gender Policy Framework was focused on monitoring municipal of appointments of women.

Table 6.7: Sub-themes- Leaders of public interests

Chapter 9 Institution
Civil Society
Public Officials

Table 6.7 shows the following sub-themes: Chapter nine institutions are a group of organisations established in terms of Chapter 9 of the Constitution to guard democracy, the table further outlines civil society and public officials.

6.2.6 Theme 6- Leaders in the defence of public interests (R6 + B1)

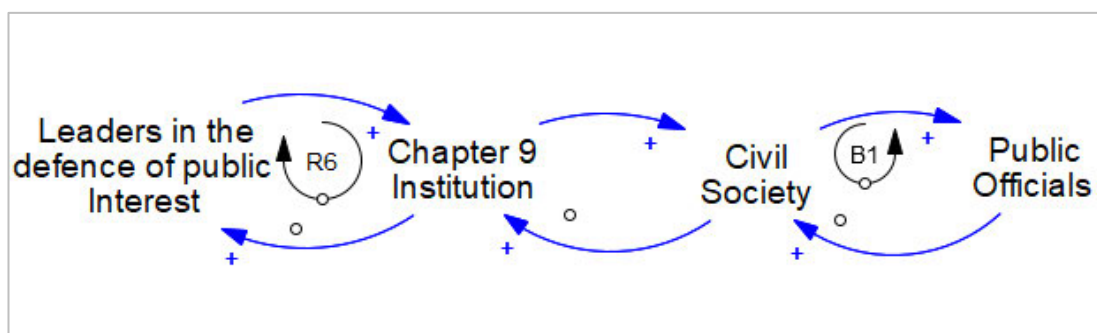


Figure 6.6: CLD Leaders in the defence of public interests

Figure 6.6 indicates the increase in Chapter 9 institutions who are leaders in the defence of public interest (R6). This notable increase of these themes shows the interchangeable increase of civil society (B1), which complement each other. Where leaders in the defence of public interest are concerned, the question arises who are (should be) treated as legitimate stakeholders, or those stakeholders who cannot speak for themselves, including future generations and those of a non-human nature. The recurrences of an increase of leaders in the defence of public interest (R6) creates a relationship to civil society (B1). Here the question arises, what secures (ought to be) the emancipation of those affected from the premises and promises of those involved in financial management? In other words, where does (should) legitimacy lie in leadership positions?

Participants stated leaders who are in the public interest's defence; that is, actors who oversee the use of public monies and keep those entrusted with their management accountable, are those in the **Chapter 9 Institutions**, **Civil Society**, and **Public Officials**, as seen in figure 6.6. The investigation

indicated these stakeholders are responsible to ensure the financial administration of public funds is accountable.

The Constitution mandates COGTA to help and strengthen municipalities' capacity to self-govern, exercise their powers, fulfil their responsibilities, and assure successful performance. The Local Government Audit conducted by the South African AG has painted a grim picture of the state of municipalities in the KZN province, with audit results revealing a declining trend over time. The Department began a process of performing detailed assessments of the status of the province's local governments and traditional councils by devising a comprehensive, evidence-based, **turnaround strategy**, as well as tailored support strategies that would be executed gradually. The Department remains dedicated to providing targeted assistance to municipalities and traditional institutions, in order to ensure they stay completely compliant with the laws, promote public accountability, and conduct themselves ethically at all times.

COGTA also assisted municipalities in filing required posts for top management positions such as MMs and CFOs, as well as completing competency evaluations. The Department continued to review reports presented by councils to the MEC to be able to guarantee the hiring of competent and qualified senior managers for municipal posts. Further to this, the Department aided in the creation of the Local Government Handbook to assist municipalities in carrying out their legal mandates.

During the 2019/20 fiscal year, COGTA also provided hands-on and strategic help to municipalities in debt to ESKOM. The Department submitted a report that included specific recommendations for municipalities that owed ESKOM, as well as financial assessments, payment plans, and a comparison of bulk purchases to sales. Debt owing to municipalities is causing revenue problems, resulting in the Department going through a process of procuring specialists to provide greater

capacity to municipalities. Moreover, the Department provided financial and governance support as part of the package. To address this issue, a Provincial Coordinating Forum on Government Debt was formed.

To guarantee alignment with municipal support plans, COGTA convened Back to Basics Strategic Sessions with municipalities and sector partners. All municipal service delivery challenges highlighted by the local government specialists were further linked with business-to-business (B2B) issues. Weekly Nerve Centre meetings were used to compile and facilitate progress reports, from where highlighted issues were forwarded to the appropriate units for action. Local Government Specialists continued to work with municipalities on a one-on-one basis, identifying obstacles, and developing project plans to address issues raised, as well as resolving issues obstructing service.

Table 6.8: Sub-themes- stakeholder's involvement

Trained specialists
Officials by Government
Chief Financial Officer
Communities
Civil Society
Treasury
Political Leaders

Table 6.8 above shows the sub-themes for the seventh grouping, comprising trained specialists, officials by government, the CFO, and communities, as well as civil society, treasury and political leaders.

6.2.7 Theme 7- Stakeholder involvement in PFM (R7, B2)

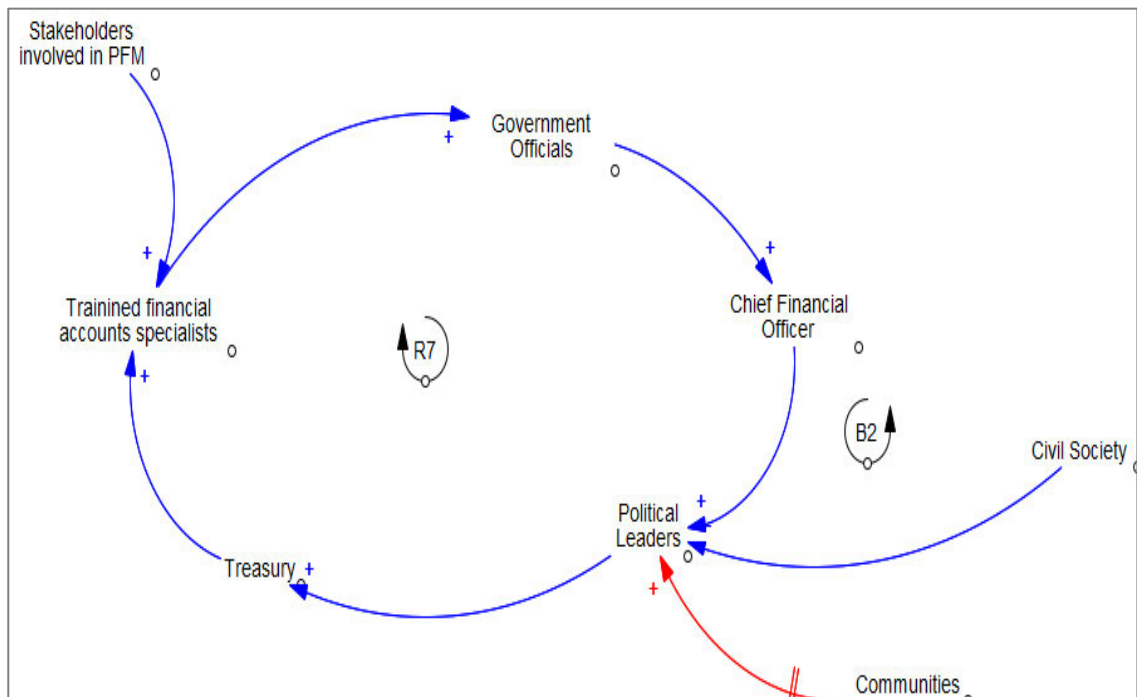


Figure 6.7: CLD Stakeholder involvement in PFM

Figure 6.7 indicates the increase of stakeholders involved in the improvement of PFM (R7). There is an increase of participation and involvement of political leaders that, at times, decrease community involvement (B2). Participants viewed various experts and professional bodies as vital in the execution of this work, when determining the relevant skills and knowledge required for the financial management of public finances. PFM is claimed to engage trained financial accounts specialists, CFOs, financial committees, and government officials, as well as treasury, **political leaders, and communities**, which are the most affected, as seen in figure 6.7 above.

Participants in the interview process frequently blamed poor political leadership for the failure to properly exercise authorities and perform functions. Infighting in councils was mentioned several times as a cause of paralysis, as were mistaken political goals that resulted in unworkable decisions.

Procurement methods that impeded infrastructure provision and, as a result, service delivery, were also regularly blamed.

Frequent delays in engaging contractors to provide outsourced services have, additionally, been attributed to procurement procedures. A variety of reasons were given, including onerous hiring laws, appointing officers, and so on. Not surprisingly, the lack of capacity within local government was widely cited by participants as the cause of the role's failure. The issue of capacity is discussed in more detail below; however, for present purposes, suffice it to say a lack of capacity results in an inability to exercise powers and functions that require both general and specialised managerial skills. Finally, it is understood unsolicited, albeit often repeated, explanations by participants for underperformance were their inability.

To provide a greater relationship of management and policy implementation, an effort to harmonise the MFMA with the Municipal Systems Act was initiated. The department has arranged semi-annual meetings with stakeholders in the local government sector to discuss and adopt resolutions on improving financial management, as part of the process of enhancing financial management governance and compliance.

The yearly MFMA compliance reports, built from quarterly compliance reports, highlight accomplishments and areas where defects require correction. The financial management grant was given to all 257 municipalities. According to the annual review of support plans, funds were allocated to appoint financial management interns, improve financial management systems, compile the Annual Financial Statements (AFS), and train officials to meet minimum competency levels, while also addressing audit findings and shortcomings, and strengthening the capacity of Budget and Treasury Offices.

The Macroeconomic Convergence Programme of the SADC remained a focal point of the integration agenda (SADC 2017). In order to strengthen financial

and **economic integration**, SA prioritized involvement, accomplishment of stated goals, and experience exchange among member states. In May and November 2019, the National Treasury successfully completed the International Monetary Fund (IMF) staff visit and the IMF Article IV Consultation on behalf of the South African government.

Table 6.9: Sub-themes - Tragedy of the commons

Public finance and resource Management
Performance and capacity
Policy framework
Limited resources
Integrated financial management system
Leadership and capacity
Provision of services

Table 6.9 sub-themes “tragedy of the commons” highlighted PF and resource management, moreover performance and capacity, policy framework, limited resource and integrated financial management, as well as leadership and capacity, along with the provision of services, were also emphasised.

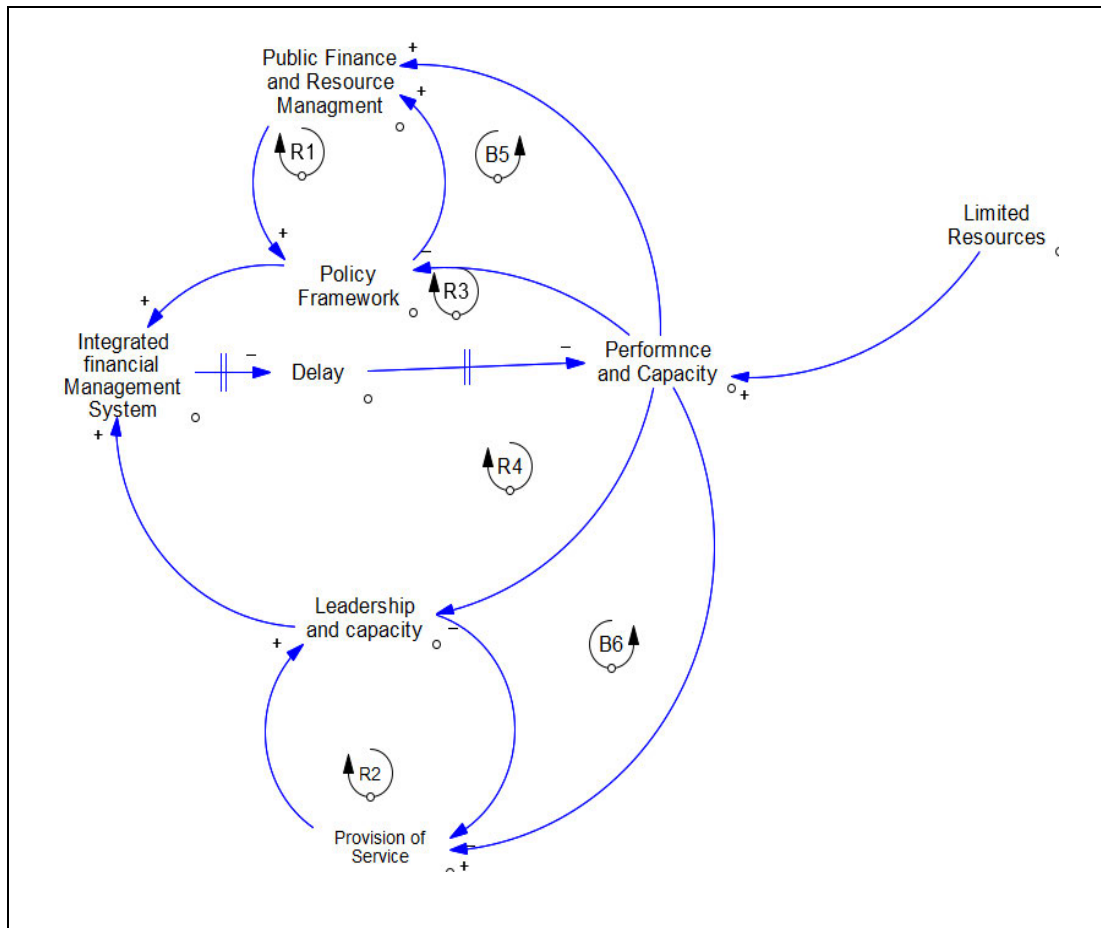


Figure 6.8: Tragedy of the commons

Figure 6.8 indicates each person in the "Tragedy of the Commons" system pursues acts that benefit them individually (R1 and R2). However, when the quantity of activity is too high for the systems to support, the commons becomes overburdened, and everyone's benefits diminish (B5 and B6). Effective remedies to the "Tragedy of the Commons" situation are never found at the individual level. Asking questions such as "What the incentives are for people to keep doing what they're doing?" Is it possible to make the long-term collective loss more tangible and immediate for individual actors? allow finding a means to balance individual short-term rewards with long-term repercussions. A governing body charged with ensuring the resource limit's sustainability can assist. As a result, this condition is linked to the study beneficiaries, as well as those represented who do not have a voice.

6.3 ARCHETYPES USED FOR THIS STUDY

This study decided on a “Tragedy of Commons” archetype. This study explores the systemic constraint of PFM; therefore, this archetype will contribute substantially in addressing inefficiencies within Municipalities. The commons is considered as open and freely available to all. Each participant in the system discovers they could benefit from utilising the commons, while not having to pay ‘whatever’ in return. The more they employ it, the more they benefit from their interest. Thus, to maximise their person benefit, they continue to gain from the commons as much as they want. For a period, which will be anywhere from months to centuries, the entire interest or overall drawing of useful resource from all players, remains within the carrying capacity or limits of the commons. Should the entire interest in no way attain the ability limit, then the “Tragedy of the Commons” structure is not triggered at all. In a world of finite resources, however, the boundaries are finally reached, whilst overall utilisation continues to grow (Kim & Anderson 2011).

At work, a "Tragedy of the Commons" archetype means reaching a consensus on exactly which commons are overworked. When no one can see how individual activities will eventually lower everyone's benefits, the debate will likely centre on why individual A should stop doing what he is doing, and why individual B is allowed to do what she is doing. Effective answers for a "Tragedy of the Commons" situation never reside at the individual level, hence, debates at that level are rarely helpful (Kim 2012).

Finding the commons is merely the first step. Other questions that help characterise the problem and suggest successful actions include:

- What are the incentives for people to keep doing what they're doing?
- What are the motivations for people to keep doing what they're doing?
- Who, if anyone, is in charge of the incentives?
- What is the time-frame in which individuals benefit from their actions?

- What is the time frame in which collective actions cause everyone to lose?
- Is it possible to make long-term collective loss more palpable, more present?
- What are the resource's limitations?
- Is it possible to replenish or replace it?

(Kim and Collen 2012).

Conciliating short-term individual incentives with long-term cumulative repercussions is the leverage in dealing with a "Tragedy of the Commons" situation. Evaluating the current reward system may reveal ways in which incentives might be designed to promote coordination among the many stakeholders, in both their individual and collective interests. Since the "collapse" of the commons takes considerably longer than individual gains, it is critical interventions are designed so current activities contribute to **long-term solutions**. For more information on this archetype, see "The Fifth Discipline: The Art and Practice of the Learning Organization" (Senge 1990), which provided a useful understanding in the selection and familiarisation of the chosen archetype that fits this research.

6.4 INTEGRATED MODEL FOR FINANCIAL MANAGEMENT IN THE PUBLIC SECTOR

The integrated model for public sector financial management covers many elements that affect financial management. The model combines all themes discussed in chapter 5 and 6 of the research. This model involves SD, archetypes, leadership, and policy importance, as well as researchers, organisations, and economic growth. SD examines the intricate interactions between system components across time. Complex systems have patterns or structures called systems archetypes. The integrated approach relies on these concepts to analyse the causes of public sector financial mismanagement.

In order to effectively manage public budgets in an efficient manner, as shown in figure 6.9 below, political leaders need to be able to combine all the relevant factors. Leadership that is effective guarantees established policies and processes are adhered to, and the management of financial resources is both transparent and accountable. The integrated model places an emphasis, in addition, on the policies and procedures necessary for PFM. The distribution of resources and the expenditures of the government are governed by policies and regulations. It is, therefore, necessary to have well-defined, easily accessible, and strictly enforced policies, in order to avoid financial misconduct. Improvements in PFM are dependent on the work of researchers and organizations.

Researchers can provide novel approaches to the administration of financial resources, while organizations can assist in the execution of laws and procedures. In this model (figure 6.9), the arrows reflect the inter-relationship of elements connected through the feedback loops. The negative symbol (-) depicts the impacts on factors that lead to financial mismanagement, and the positive sign (+) presents the interconnection of factors that impacts all themes presented in this model.

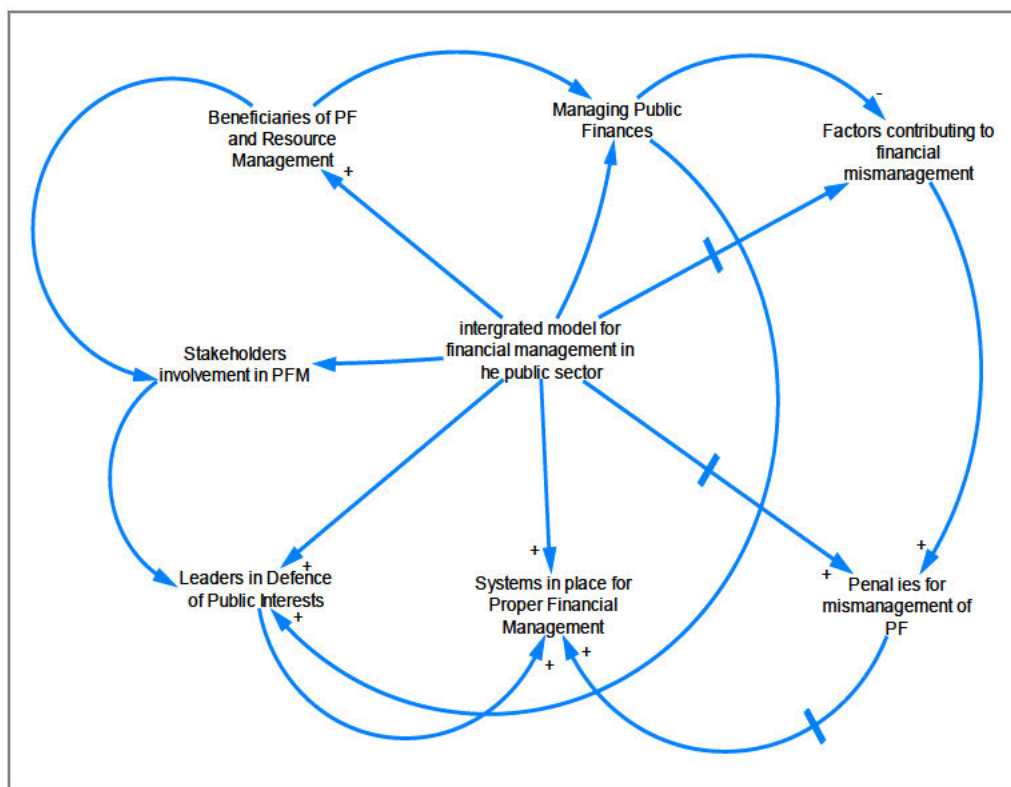


Figure 6.9: Integrated financial management model

The above model (figure 6.9) shows effective financial management remains as one of the central pillars on which municipalities succeed in providing critical services and allocating scarce resources equitably. To achieve such success requires an integrated model for financial management based on various crucial components such as:

- **Budgeting and Planning**

Commencement calls for outlining clear objectives while forecasting revenue and expenditure - creating an integrative budget that optimally allocates resources across diverse programmes or services. Transparency emanating from inclusive stakeholder participation remains crucial throughout the decision-making process.

- **Financial Reporting and Analysis**

Municipal authorities must establish credible frameworks for recording transactions, while monitoring performance metrics through data analysis aimed at informed decision-making processes, ensuring timely access to accurate reports by all concerned parties.

- Internal Controls and Risk Management

To prevent fraud or abuse, in addition to ensuring optimal utilisation of public resources, municipalities must have strong internal controls, coupled with risk mitigation strategies, which encompass misuse or waste avoidance. To ensure effective financial management, municipalities must implement policies and procedures for monetary transactions that include internal controls compliant with regulations, while integrating risk management principles throughout all aspects; from budgeting to analysis. Revenue generation is essential for long-term financial sustainability, therefore, exploring innovative methods such as PPPs or grants, alongside setting appropriate tax rates and fees, are necessary, at the same time implementing efficient revenue collection processes.

Lastly, municipalities should invest continuously into building the capacity of staff through training opportunities to enhance their development of skills associated with thorough management practices. This creates a culture of transparency along with accountability whilst promoting diligent financial behaviour.

Ultimately an integrated model for successful municipal finance provides effective resource allocation, along with increased transparency, leading to greater accountability across all levels within these municipalities and organizations. Attaining fiscal targets while fulfilling residents' needs is feasible for municipalities that employ optimal budgeting and planning techniques. In addition to effective financial reporting and analysis, prioritising internal controls and risk management measures greatly contributes to this success. Furthermore, an emphasis on revenue generation and collection, coupled with

strengthening financial management capacities ensures a steady progress towards these goals.

Economic growth concludes the integrated model. Economic expansion generates cash and resources for public services and infrastructure. To benefit citizens in the long-term, economic growth must be sustainable and resources handled well. Finally, the integrated model for public sector financial management is complex and multifaceted. Leaders, policymakers, researchers, and organisations need to collaborate to manage public finances transparently, efficiently, and effectively.

6.5 CONCLUSION

The purpose of this chapter was to address issues related to PFM and its impact on municipal leadership capabilities, by focusing on SD and presenting models to expatiate. The perspectives, repercussions, and inferences drawn from semi-structured interviews with participants during data analysis were significant. Systems thinking was specifically significant, because “it promotes thinking about real-world social systems”. This study delves into the complexities of each viewpoint, with each providing a foundation for the process known as action research.

The study places greater emphasis on systemic thinking, reflecting its increasing prominence in modern action research. Seven major themes were identified in this study, with a variety of sub-themes uncovered in the data collection. These themes and sub-themes were acquired to achieve the key research objectives. When utilising such an approach, archetypes can assist policymakers, public management experts and legal practitioners in navigating the tension between generality and context sensitivity. The archetypes drawn in this research were supported with the use of I-see systems from Stella architect and VENSIM software for premium modelling and interactive simulations.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

The aim of this final chapter is to provide the conclusion and recommendations in an attempt to comprehend why the continued failure of municipalities under COGTA KZN persists. The previous chapters explored literature on leadership, PFM, and good governance, where Chapter 3 focused on systems thinking literature, with a sub-chapter presented to understand the systems archetypes of this study. The research methodology, and study results from using a survey were also presented.

To recap on the objectives of this research:

- This study aimed to develop a systems approach in enhancing leadership capabilities in PFM. The main objectives were to:
 - Identify opportunities and challenges associated with current PFM and leadership approaches.
 - Explore nascent approaches ensuring effective leadership capabilities in undertaking PFM in its dynamic nature for effective service delivery.
 - Creation of new knowledge by building a learning system to develop models that effectively cope with PFM inefficiencies.

7.2 DISCUSSION

Reports from the AG have identified a shortfall in several sections of PFM. According to the findings of this study, a number of different municipalities have recognised a disparity in financial mismanagement and the challenges it brings. Because the problems found in this study demand a robust solution for more challenges to be managed within municipalities, the adoption of various techniques and utilisation of system approaches and archetypes were necessary. PFM is seen as an essential subject, and its advancement ought

to be accorded a high priority both in academic circles and in the administrative structures of municipalities.

In SA, the existing population's rising demand for improved education and health services, as well as transportation, water, and waste disposal systems, causes a deterioration that eventually leads to failure. Municipalities require extensive support and coaching to upgrade present PFM systems. It is no longer possible for organisations and municipalities to rely on training as a solution; instead, they must identify alternate approaches to address the issue, in addition to training. Consequently, promoting SD as a means of problem resolution via utilising and developing CLDs is essential.

In order for local governments to adapt to new ideas and accept change, their PFM systems need to be improved. A "wicked problem" discovered in the financial mismanagement and capacity of municipalities was also addressed by the investigation. Exploring methods that can successfully deal with issues pertaining to leadership capacities in order to improve PFM was one of the primary objectives this study was tasked with addressing. The Adaptive Leadership paradigm was developed in 1994 by Professor Ronald Heifetz of Harvard University. This paradigm places an emphasis on leadership change and is used in situations where organisations must adapt to a significantly changing environment (Heifetz 1994). This study draws from Professor Heifetz's work. As a consequence of this, adaptive leadership offers a significant amount of potential for directing academics "through difficult challenges and transformations" (Heifetz 1994).

Systems thinking has, according to Senge (1990), been recognised for a significant amount of time as an essential component of organisational learning. People who use systems thinking in their organisations to define personal values, find answers to key organisational problems, build strategic plans for organisational sustainability, and so on, in the process of strengthening their organisational learning skills, are people who utilise

systems thinking in their organisations. Even while having a group of people that embraces systems thinking does not necessarily guarantee organisational learning, it has been identified as a beneficial tool that can guide enterprises and organisations. Although it is necessary for members of an organisation to have a grasp of current events in order for the organisation to learn, systems thinking can be a helpful tool and point of view to obtain a better understanding of current events and to answer the research questions of this study.

7.3 RECOMMENDATIONS

The study will also contribute to an improved comprehension of careers and educational opportunities in systems thinking, as well as an overall better understanding of systems thinking. The practise of personal financial management makes extensive and varied use of archetypes. Systems thinking has the capacity to increase curriculum development for students and lecturers, as well as teaching and learning, and it also has the ability to contribute to satisfying innovative (VUCA) needs. Systems thinking remains a relevant tool and perspective for gaining an understanding of current events, and it was able to answer the questions posed by this study in the manner detailed below.

The process of accomplishing the goals of this study was guided by the following research questions:

- What are the various views and opinions of the participants that pay attention to the complicated updated PFM structures?
- What are the structural flaws that result in inefficiencies in the handling of public funds, and how do they affect service provision?
- What are some of the most effective strategies for addressing the current difficulties confronting leadership in PFM and service delivery?
- To what extent does the restructuring of the state sector encourage employees to contribute to the provision of quality services in the traditional sense of the public sector, as well as in the traditional sense of the institution-building process in SA?

It is common knowledge that implementing stricter control measures will not result in a solution effective in the long run. This is due to, on the one hand, individuals who aim to commit fraud, who will not be deterred by stricter controls or higher financial control standards. On the other hand, what is necessary is a culture that upholds, promotes, and insists upon adherence to ethical standards, accountability, transparency, and fundamental principles. As part of their constitutional duties, national and provincial governments will need to fulfil their obligations to provide financial assistance to municipalities in order to ensure the long-term viability of local communities. In order for municipalities to effectively address the concerns regarding financial management and accountability in municipalities presented in this research, municipalities must first have a comprehensive understanding of the issues.

Before a problem can be effectively managed strategically, it is necessary to first thoroughly investigate its roots and get to the heart of its nature. It is quite improbable that municipal governments will possess the necessary level of management experience required for this endeavour. A potential component of the solution could be to bring in experts in management from outside the organisation for this function; however, in the end, the internal management capacity of municipal councillors and officials will need to be uncovered and developed to its fullest potential.

A systems approach, such as SSM, SCH, and SD was the most likely, along with the most important approaches, to address the serious difficulties that require organisations to apply a different approach and ensure these approaches are not managed superficially. These severe problems require organisations to use a new approach and ensure these approaches are not managed superficially, and a more radical approach is followed. The utilisation of these methodologies, as well as their combination, was encouraged, which resulted in an improvement of the attitudes and viewpoints held by individuals involved in PFM.

According to the National Treasury Report (2019/2020), there was very little progress made in the audit outcomes of the KZN province, leadership failed to adequately practise and enforce accountability, and vital controls continued to fail. The majority of the district municipalities had difficulty with fundamental financial and performance management processes, demonstrated a lack of responsiveness in the process of executing and monitoring action plans, and had weak governance structures, which prevented effective accountability from being established. In addition, effective internal control systems to support good governance and discipline were not always encouraged by leaders, who did not always have an influence on those structures. As a result, there is a need to place a higher emphasis on the exercise of political oversight and on meeting the expectations of citizens. In Chapters 2 and 5, this topic was discussed in significantly more depth than anywhere else in the present investigation.

The effect of this can be seen in the increasing irregular spending by local government, reported to be R6.5 billion for the year under review, with eThekwin Metro contributing R2.34 billion of that total. Audits finished after the cut-off date for the report, revealed an extra R17.2 million in improper expenditures. Although there were authorities in place to carry out these obligations, the use of consultants was continued., with these consultants frequently called upon to assist in the production of financial reporting and statements, and the KZN province spent R95 million on them. R1 million of this was spent by municipalities that had not finished their audits by the date considered the cut-off for the report. One of the most significant problems that has been plaguing local governments over the course of the past few years has been their inability to pass audits without any qualifications.

Another noteworthy problem local governments have continued to experience difficulties with over the past few years is a lack of effective and efficient financial management. This problem has become increasingly prevalent.

According to De Vries and colleagues (2008), poor financial management in the public sector of SA impedes progress, development, and growth. It raises questions regarding the honesty and integrity of the government, and it has such an effect on the economy that, when the government loses money as a result of corruption and mismanagement, it is compelled to recuperate those losses through increased taxes and tariffs.

7.4 CONCLUSION

The first chapter discussed the introduction and background of the study, in addition to providing an explanation and motivation for carrying out the research. With that said, it included a statement of the problem, research questions, research aims and objectives, and the significance of the study, as well as research limits and a brief explanation of the research method utilised. In Chapter 2, a number of different styles of leadership suitable for the public sector were evaluated and compared. Leadership concerns in worldwide communities, as well as those at the national, regional, and local governmental levels, also received special consideration in this study.

The significance of public administration and the ability to think systemically are topics covered in Chapter 3. System approaches such as SSM, VSM, SD, and CSH are among those briefly introduced and discussed in this research. In addition, case studies of failed leadership at all levels were investigated, with particular emphasis on the functioning of local governments and the provision of services. As a sub-chapter of this investigation, Chapter 3(A) focuses on providing an overview of Systems Archetypes, as well as the development of models applying archetypes in SD. Furthermore, the utilisation of causal loops and critical thinking abilities that were evaluated were also presented in this chapter, which examined models and the many different system archetypes, covering the various applications of each archetype in extensive detail. The advantages and disadvantages of the archetypes were also demonstrated and discussed.

The research presented information and a description of the research methodologies employed in the research in chapter 4 of the study, with this study's research instruments for data analysis explained in further detail. Additionally, the location of the study and the methodology for data collection, which included semi-structured interviews, were mentioned. This chapter examined the research design, the research methodology, and a number of different strategies for data gathering. SD, SSM, and CSH all provide reviews of action research. In Chapter 5, this study detailed the findings and data gathered from participants by using CSH. The study also discussed the tools used to construct a thematic analysis and an NVIVO version. The NVIVO software was used to present the data and perform their analysis.

7.4.1 An investigation into the current state of leadership in financial management

The purpose of this study was to explore the current status of leadership in public sector financial management using a systems approach. In Chapter 6, this study addressed the learning interventions used, as well as the application of systems methodologies appropriate for this study. The utilisation of SD and the resulting archetypes were investigated in an effort to address the leadership issues and PFM inefficiencies prevalent in the KZN province. In addition, a demonstration of SD models created with VENSIM software was presented.

The last chapter of this study provides a synopsis of the thoughts and discussions presented in the other chapters, with an emphasis on the results of the study's research. Last but not least, some concluding reflections and suggestions for future research are presented and discussed. The final chapter also presents the proposed integrated PFM model for cohesive financial management in the public sector. All sub-themes and themes emanating from this research are integrated in the model, which was constructed with the use of VENSIM software; this model represents SD - a dominant model for this study.

It is common knowledge the methodologies investigated can each provide a valuable contribution to the process of modelling PFM. Current and future leaders of PF were intended to benefit from this research by having their capabilities enhanced. On a more practical level of municipal organisation, this research is useful to those who already hold the position of Chief Director, as well as prospective Chief Directors, academics, and managers in the financial environment of municipalities. It is possible a subsequent or comparable study might be extended to other departments and municipalities.

The study has to, additionally, be supported by the implementation of 4IR initiatives and innovation in order to make certain the VUCA regime in South African towns and cities are equal to that of more developed countries located all over the world. As a consequence of this, PFM will be developed even further through comprehensive pathways that boost PFM and leadership competencies utilising the SSM, CSH, and SD. These pathways will be implemented in the future.

This research is significant and useful on a scholarly level, since it will encourage future development and innovation in the field of public administration. Specifically, the research will stimulate the creation of new technologies. Because of this, there are several opportunities for involvement that are appropriate, as well as the possibility of enhancing the process of curriculum creation and information sharing in the sector. Students, departmental organisations, and municipalities will all gain significantly from the study's findings regarding the application of SSM, SD, and CSH methodologies. Because of this, the researcher will have a greater possibility to specialise in the aforementioned strategies for personal development and improvement. This work will make a remarkable contribution, both to the field of public management and to the development of curricula to encourage the use of these methods presented in this study.

REFERENCES

- Abson, D., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., Von Wehrden, H., Abernethy, P., Ives, C., Jager, N. & Lang, D. 2016. Leverage points for sustainability transformation. *AMBIO A Journal of the Human*, 46, 30-39.
- Acemoglu, D., and Robinson, J. A. 2012. Why nations fail: The origins of power, prosperity, and poverty. *Currency*.
- Ackoff, R. L. 1994. Systems thinking and thinking systems, *Systems Dynamics Review*, 10(2-3): 175-188.
- Adetunji, I., Price, A., Fleming, P., and Kemp, P. 2003. The application of systems thinking to the concept of sustainability. In: Greenwood, D.J. (Ed.), 19th Annual ARCOM Conference, 3-5 September 2003, and University of Brighton. *Association of Researchers in Construction Management*, 1: 161-70.
- Adger, W. N., Brown, K., Fairbrass, J., Jordan, A., Paavola, J., Rosendo, S., & Seyfang, G. 2003. Governance for sustainability: towards a 'thick' analysis of environmental decision-making. *Environment and planning A*, 35(6), 1095-1110.
- Aizenman, J., and Shah, A. 2013. Overview: Macroeconomic and financial policy challenges of China and India. *Journal of International Money and Finance*, (39), 1-5.
- Ajam, T. 2016. Public Financial Management Reforms for value-for-money in selected South African Provincial Governments. PhD Thesis, University of Pretoria.
- Ali Azadeh, K. D. 2014. An Integrated Artificial Neural Network and Systems Dynamics Approach in Model to Enhance Industrial Intelligence. *Systems Research and Behavioural Science*, (DOI: 10.1002), 236–257.
- Andrew, F. 2011. Entrepreneurship lobby researches for country's star SMEs.

Antwi, K. B., Analoui, F., and Nana-Agyekum, D. 2008. Public sector reform in Sub-Saharan Africa: what can be learnt from the civil service performance improvement programme in Ghana? *Public Administration & Development*, 28(4), 253-264.

Arkers, W. 2015. The Domain of Complex Systems Archetypes. National Centres for systems of systems Engineering management (Old Domain University. USA).

Auditor-General (AG). 2011. *Consolidated Report of the Auditor-General on the Local Government Audit Outcomes 2009-10*. AG.

Auditor-General (AG). 2014. *Consolidated Report of the Auditor-General on the Local Government Audit Outcomes 2012-13*.

Auditor-General (AG). 2015. *Consolidated Report of the Auditor-General on the Local Government Audit Outcomes 2013-14*.

Auditor General of South Africa (AGSA). 2018. Consolidated general report on the audit outcomes of local government 2016–17, Office of the Auditor-General South Africa, Pretoria.

Auditor General of South Africa (AGSA). 2019. Consolidated general report on the audit outcomes of local government 2017-2018, Office of the Auditor-General South Africa, Pretoria.

Avolio, B. J. 2010. Pursuing authentic leadership development. In Nohria, & R. Khurana (Eds.), *Handbook of leadership theory and practice*. Boston, MA: Harvard Business Press. 739-765.

Balvanera, P., Calderón-Contreras, R., Castro, A. J., Felipe-Lucia, M. R., Geijzendorffer, I. R., Jacobs, S., Martín-López, B., Arbieu, U., Speranza, C. I., Locatelli, B., and Harguindeguy, N. P. 2017. Interconnected place-based social–ecological research can inform global sustainability. *Current Opinion in Environmental Sustainability*, 29, 1-7.

- Banson, K. E., Nguyen, N. C., and Bosch, O. J. 2016. Using system archetypes to identify drivers and barriers for sustainable agriculture in Africa: a case study in Ghana. *Systems Research and Behavioral Science*, 33(1), 79-99.
- Barbaroux, P. M. 2011. A design-oriented approach to organizational change: Insights from a military case study.
- Bass, B. M. 2000. The future of leadership in the learning organisation. *Journal of Leadership & organisational Studies*, 7(3), 18-40.
- Bass, B. M. 2008. *The Bass handbook of leadership: Theory, research and managerial applications*, 4th ed. New York, NY: Free Press.
- Bass, B. M., and Riggio, R. E. 2006. *Transformational Leadership*, 2nd ed. New York, NY: Psychology Press.
- Bass, B. M., Avolio, B. J., Jung, D. I., and Berson, Y. 2003. Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, 88(2), 207-218.
- Bass, B. M., and Avolio, B. J. 1994. Transformational leadership and organizational culture. *The International Journal of Public Administration*, 17(3-4), 541-554.
- Bass, B. M. 1990. From transactional to transformational leadership: Learning to share the vision. *Organizational dynamics*, 18(3), 19-31.
- Bass, B. M. 1997. Does the transactional–transformational leadership paradigm transcend organizational and national boundaries? *American psychologist*, 52(2), 130.
- Bass, B. M., and Avolio, B. J. 1997. Concepts of leadership. *Leadership: Understanding the dynamics of power and influence in organizations*, 323, p.285.
- BBC News. 2019. *Do today's global protests have anything in common?* 22 October 2019. Available: <https://www.bbc.com/news/world-50123743> (Accessed 11 November 2019).

- Beach, D., and Pedersen, R. B. 2016. *Causal case study methods: Foundations and guidelines for comparing, matching, and tracing*. University of Michigan Press.
- Beer, R. D. 2000. Dynamical approaches to cognitive science. *Trends in cognitive sciences*, 4(3), 91-99.
- Beer, S. 1979. *Heart of Enterprise*. Chichester: John Wiley.
- Beer, S. 1985. *Diagnosing the system for organizations*. Chichester: John Wiley.
- Beer, S. 1972. Cybernetics—A Systems Approach to Management. *Personnel Review*.
- Benn, S., and Baker, E. 2009. Advancing sustainability through change and innovation: A co-evolutionary perspective. *Journal of Change Management*,
- Blidisel, R., Popa, A., Tudor, A. T., and Farcane, N. 2010. Financial management and control in public sector. Annals of Eftimie Murgu University Resita, Fascicle II, *Economic Studies*, pp. 11-18.
- Botes, P. S., Brynard, P. A., Fourie, A. J., and Roux, N. L. 1995. *Public Administration and Management: A guide to Central, Regional and Municipal Administration and Management*, 2nd ed. Pretoria: Haum Tertiary.
- Bourgon, J. 2007. Responsive, responsible and respected government: Towards a new public administration theory. *International Review of Administrative Sciences*, 73(1), 7-27.
- Bowers, L., Alexander, J., Bilgin, H., Botha, M., Dack, C., James, K., Jarrett, M., Jeffery, D., Nijman, H., Owiti, J., Papadopoulos, C., Ross, J., Wright, S. & Stewart, D. 2014. Safewards: The empirical basis of the model and a critical appraisal. *Journal of psychiatric and mental health nursing*, 21.
- Braun, V., and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

- Braun, V., and Clarke, V., 2019. Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, 11(4), 589-597.
- Braun, W. 2002. The Systems Archetypes. In *The Systems Modelling Workbook*.
- Bryman, A. 2012. *Social research methods*. New York: Oxford University Press.
- Bryman, A. 2010. Quantitative vs. qualitative methods. *Sociology: introductory readings*, 47.
- Bryson, J. M, Crosby, B. C., & and Bloomberg, L. L 2014, Public value governance: Moving beyond traditional public administration and the new public management, *Public Administration Review*, 74(4), 445-456. <https://doi.org/10.1111/puar.12238>
- Burns, D. 2007. *Systemic action research. A strategy for whole system change*. (pp. 208) Policy Press.
- Burns, J. M. 1978. *Leadership*. New York, NY: Harper and Row.
- Cabrera, D., and Cabrera, L. 2019. Complexity and systems thinking models in education: Applications for leaders. *Learning, design, and technology: An international compendium of theory, research, practice, and policy*, pp.1-29.
- Castano, M. C. N., and Dapula, G. F. 2017. Core Self-Evaluations, Job Satisfaction, Transformational and Servant Leadership Model in the Roman Catholic Education System. *Asian Journal of University Education*, 13(2), 1-15.
- Checkland, P., and Poulter, J. 2006. *Learning for Action; A Short Definitive Account of Soft Systems Methodology and its use for Practitioners, Teachers and Students*, John Wiley & Sons, Ltd, West Sussex England.
- Checkland, P., and Holwell, S., 1998. Action research: its nature and validity. *Systemic practice and action research*, 11(1), 9-21.

- Checkland, P. 1981. *Systems thinking, systems practice*, Wiley: Chichester.
- Checkland, P. 1999a. *Soft systems methodology: a 30-year retrospective; and, Systems thinking, systems practice*, John Wiley: Chichester.
- Checkland, P. B., and Haynes, M. G. 2019. Varieties of systems thinking: the case of soft systems methodology. *Management Control Theory*, pp.151-160.
- Checkland, P. B. 1989. Soft systems methodology. *Human systems management*, 8(4), 273-289.
- Christensen, T., and Laegreid, P. 2013. *New Public Management*, pp. 528. Routledge.
- Cloete, F., and Wissink, H. eds. 2000. *Improving public policy*. Van Schaik.
- Cloete, J. 1998. *South African Public Administration and Management*. Pretoria, Van Schaik.
- Cloete, J. T. 2005. *South African Municipal Government and Administration*. Pretoria: Van Schaik.
- Cohen, L., Manion, L., and Morrison, K. 2011. *Research methods in education* 7th ed. London: Routledge.
- Corbin, J., & Strauss, A. 2008. *Basics of qualitative research*. London: SAGE Publications Ltd.
- Coughlan, P. 2002. Action research for operations management. *International journal of operations & production management*.
- Craythorne, D. L. 2006. *Municipal administration: The handbook*. 6th ed. Cape Town: Juta & Co.
- Creswell, J. 2013. *Qualitative inquiry and research design: Choosing among five*. Los Angeles, CA: SAGE.
- Creswell, J. W. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, SAGE Publications.

Cullum, C., Rogers, K. H., Brierley, G. and Witkowski, E. T. 2016. Ecological classification and mapping for landscape management and science: Foundations for the description of patterns and processes. *Progress in Physical Geography*, 40(1), 38-65.

Curristine, T., Lonti, Z. and Joumard, I., 2007. Improving public sector efficiency: Challenges and opportunities. *OECD journal on budgeting*, 7(1), 1-41. ISSN: 1608-7143, OECD.

Dawson, C. 2002. Practical research methods: A user-friendly guide to mastering research. How to books.

De Kock, P. M., and Slabbert, J. A. 2003. Transformational leadership in business organisations ascending to world-class status: A case study in the petrochemical industry. *SA Journal of Industrial Psychology*, 29(1), 1-7.

De Steenhuijsen-Piters, B., Dengerink, J., Posthumus, H., and Vellema, S. 2018. *Archetypes: Common systemic behaviours in food systems*. Wageningen Economic Research.

Den Hartog, D. N., Van Muijen, J. J., and Koopman, P. L. 1997. Transactional versus transformational leadership: An analysis of the MLQ. *Journal of occupational and organizational psychology*, 70(1), 19-34.

Denis, D. J., Hanouna, P., and Sarin, A. 2006. Is there a dark side to incentive compensation? *Journal of Corporate Finance*, 12, 467–488. doi:10.1016/j.jcorpfin.2005.08.006.

Denzin, N. K., and Lincoln, Y. S. 2011. *The SAGE handbook of qualitative research*. London: SAGE.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2007. *A report on skills levels in municipalities*. 6 September 2007. Pretoria: Government Printer.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2009a. *Local government turnaround strategy*, Government Printers, Pretoria.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2009b. *State of Local Government in South Africa - Overview Report*, National State of Local Government Assessments, Pretoria: Government Printer.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2014a. *Confidential Report to Select Committee on Appropriations*. Pretoria: Government Printer.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2014. *Report for the financial year 2014/2015*, Government Printers, Pretoria.

Department of Cooperative Governance and Traditional Affairs (COGTA). 2014b. *The Presidential Local Government Summit: Back to Basics*. Pretoria: Government Printer.

Department of Government Communication and information. 2018. *Municipal handbook*. Pretoria: Government Printer.

Dongre, A. P. 2012. Policy changes in the wake of globalization and its impact on Indian industries. *Journal of Policy Modelling*, 34(3), 476-496.

Donmoyer, R. 2012. Can qualitative researchers answer policymakers' what-works question? *Qualitative Inquiry*, 18(8), 662-673. <http://dx.doi.org/10.1177/1077800412454531>

Du Toit, D. F. P. 2002. *Service excellence in governance*. Cape Town. South Africa. Heinemann Publishers (Pty) Ltd.

Eden, C., and Ackermann, F. 2010a. Competences, distinctive competences, and core competences. In *A focussed issue on identifying, building, and linking competences* (Vol. 5, . 3-33). Emerald Group Publishing Limited.

Eisenack, K. 2012. Archetypes of adaptation to climate change. In *Human-Nature Interactions in the Anthropocene* (125-140). Routledge.

Eisenack, K., Villamayor-Tomas, S., Epstein, G., Kimmich, C., Magliocca, N., Manuel-Navarrete, D., Oberlack, C., Roggero, M. and Sietz, D. 2019. Design and quality criteria for archetype analysis. *Ecology and Society*, 24(3).

- Espejo, R. 1994. What is systemic thinking? *System Dynamics Review*, 10(2-3), 199-212. <https://doi.org/10.1002/sdr.4260100208>.
- Espinosa, A., Harnden, R., and Walker, J. 2008. A complexity approach to sustainability—Stafford Beer revisited. *European Journal of Operational Research*, 187(2), 636-651.
- Flick, U. 2011. *Introducing research methodology: A beginner's guide to doing a research project*. London: SAGE Publications Ltd.
- Flick, U. 2014. Mapping the field. The *SAGE handbook of qualitative data analysis*, 1, 3-18.
- Flood, R. L. 2010. The Relationship of 'Systems Thinking' to Action. *Syst Pract Action Res (2010)* 23: 269–284 ed. Maastricht, The Netherlands: Springer Science Business Media.
- Folke, C., Hahn, T., Olsson, P. and Norberg, J. 2005. Adaptive governance of social-ecological systems. *Annu. Rev. Environ. Resource.*, 30, 441-473.
- Forrester, J. W. 1961. *Industrial Dynamics*. Cambridge, MA, USA: MIT Press.
- Forrester, J. W. 1994. System dynamics, systems thinking, and soft OR, *System Dynamics Review*, 10(2-3): 245-56.
- Forrester, J. W. 1971. *World dynamics*. Cambridge Mass.
- Forrester, J. W. 2007. System dynamics—the next fifty years. *System Dynamics Review: The Journal of the System Dynamics Society*, 23(2-3), 359-370.
- Fourie, M., and Opperman, L. 2007. *Municipal Finance and Accounting*. Van Schaik Publishers. Pretoria.
- Fourie, M., and Opperman, L. 2018. *Municipal Finance and Accounting*. 3rd ed. Van Schaik Publishers. Pretoria.
- Gildenhuys, J. S. H. 1993. *Public Finance Management*. JL Van Schaik Publishers, Pretoria.

Gildenhuys, J. S. H. 1997. *Introduction to the Management of Public Finance: A South African Perspective*, Van Schaik. Pretoria.

Gita, I. N., and Apsari, R. A. 2018, June. Scaffolding in problem-based learning to increase students' achievements in linear algebra. In *Journal of Physics: Conference Series*, 1040(1), 012024. IOP Publishing.

Graetz, F. 2000. Strategic change leadership. *Management decision*, 38(8), 550-564.

Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., and Cohen, J. D. 2001. An fMRI investigation of emotional engagement in moral judgment. *Science*. 2001 Sep 14; 293(5537), 2105-8. doi: 10.1126/science.1062872. PMID: 11557895.

Greenwood, D. J., and Levin, M. 1998. Action research, science, and the co-optation of social research. *Studies in cultures, organizations and societies*, 4(2), 237-261.

Gualmini, E. 2008. Restructuring Weberian bureaucracy: Comparing managerial reforms in Europe and the United States. *Public administration*, 86(1), 75-94.

Guest, G., MacQueen, K. M., and Namey, E. E. 2011. *Applied thematic analysis*. Sage publications.

Harry, B., and Lipsky, M. 2014. Qualitative Research on Special Education Teacher Preparation. In M. McCray, T. Brownell, and B. Lignugaris/Kraft (Eds.), *Handbook of research on special education teacher preparation* (pp. 445-460).

Heifetz, R. A., and Linsky, M. 2009. *Leadership on the line: Staying alive through the dangers of leading*. Boston: Harvard Business School Press.

Heifetz, R. A. 1994. *Leadership without easy answers*. Cambridge, MA: Belknap Press.

- Heifetz, R. A., Grashow, A., and Linsky, M. 2009. *The Practice of Adaptive Leadership: Tools and Tactics for Changing Your Organization and the World*. Harvard Business Press: Boston, MA, USA.
- Heifetz, R. A., and Laurie, D. L. 2001. The work of leadership. *Harvard business review*, 79(11).
- Hesse-Biber, S. 2010. Qualitative Approaches to Mixed Methods Practice. *Qualitative Inquiry - QUAL INQ*, 16, 455-468.
- Hesse-Biber, S. 2019. The Role of Hybrid Methodologies in Understanding Complex Environmental Issues and Promoting Social Justice. *International Journal for Transformative Research*, 6(1), 20-26.
- Heusinkveld, S., and Reijers, H. A. 2009. Reflections on a reflective cycle: building legitimacy in design knowledge development. *Organization studies*, 30(8), 865-886.
- Hevner, A. R., March, S. T., Park, J., and Ram, S. 2004. Design science in information systems research. *MIS quarterly*, 75-105.
- Hobson, R. F. 1961. Critical Notices: The Archetypes and the Collective Unconscious, by CG Jung: Translated by RFC Hull. Collected Works. Vo. *Journal of Analytical Psychology*, 6(2), 161-168.
- Hodge, B. J., and Anthony, W. P. 1979. *Organisation theory: An environmental approach*. Boston: Allyn and Bacon.
- Hollnagel, E. 2018. *Safety-I and safety-II: the past and future of safety management*. CRC press.
- Holwell, M., and Reynolds. A. S. 2010. *Systems Approaches to Managing Change*. London: Springer.
- Horner, M. 1997. Leadership theory: past, present and future. *Team Performance Management: An International Journal*.

Hughes, O. E. 2003. *Public Management & Administration*. Great Britain: Macmillan Press Ltd.

Jackson, M. C. 2002. *Systems Approaches to Management*, Kluwer Academic Publishers, New York, Boston, Dordrecht, London, Moscow.

Jackson, M. C. 2003. *Systems Thinking: Creative Holism for Managers*. University of Hull, UK: John Wiley & Sons Ltd.

Jansen, E. P. 2008. New public management: perspectives on performance and the use of performance information. *Financial Accountability & Management*, 24(2), 169-191.

Javidan, M., and Waldman, D. A. 2003. Exploring charismatic leadership in the public sector: Measurement and consequences. *Public administration review*, 63(2), 229-242.

John, S. 2016. *Administration of the Public Finance Management Act, 1999 in the North-West Provincial Administration in South Africa*. PhD Thesis, University of Pretoria.

Jordaan, J., 2017. *Public Financial Performance in South Africa: A Conceptual Approach*. PhD Thesis, University of Pretoria.

Judge, A. T., and Piccolo, R. F. 2004. Transformational and Transactional Leadership: A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology*, 89(5): 755-768.

Jupp, V. 2006. *The Sage dictionary of social research methods*. Sage.

Kelly, G. 1955. *Personal construct psychology*. Nueva York: Norton.

Kemmis, S., and McTaggart, 2002. *The concept of action research*. The learning organization.

Kezar, A. J. and Holcombe, E. M. 2017. *Shared leadership in higher education*. Washington, DC: American Council on Education, 1-36.

Khalo, T. (ed.) 2007. *Municipal Financial Management: Serving the People*. Juta and Company Ltd.

Kim, D. H. 2000. *Systems Archetypes I. Diagnosing Systemic Issues and Designing High-leverage Interventions*. Pegasus Communications, Inc. Waltham, Massachusetts

Anderson, V., and Kim, D. H. 2011. *Systems archetype basics: From story to structure*. Waltham, MA: Pegasus Communications.

Kim, D. H., and Lennon, C. 1997. *Applying systems archetypes*. Pegasus Communications, Inc. Waltham, Massachusetts.

Kim, D. H. 1993. *Systems archetypes I* (Vol. 1). Pegasus Communications, Inc. Waltham, Massachusetts.

Kok, M., Lüdeke, M., Lucas, P., Sterzel, T., Walther, C., Janssen, P., Sietz, D., and de Soysa, I. 2016. A new method for analysing socio-ecological patterns of vulnerability. *Regional Environmental Change*, 16(1), 229-243.

Kubiszewski, I., Costanza, R., Daly, L., Fioramonti, L., Giovannini, E., Mortensen, L. F., Pickett, K. E., Ragnarsdottir, K. V., De Vogli, R. and Wilkinson, R. 2016. The UN Sustainable Development Goals and the dynamics of well-being.

Kuye, J. O. 2014. A critical re-think of public administration and management in continental Africa, *African Journal of Public Affairs*, 7(4), 177-185.

Lane, D. 2000. Should system dynamics be described as a 'hard' or 'deterministic' systems approach? *Systems Research and Behavioural Science*, 17, 3–22.

Lane, D. C., and Oliva, R. 1998. 'The greater whole: Towards a synthesis of system dynamics and soft systems methodology', *European Journal of Operational Research*, 107(1), 21435.

Lane, D. C., 2008. The emergence and use of diagramming in system dynamics: a critical account. 25(1), 3-23.

Lawson, A. 2013. Successful PFM reforms: what is the right context and what are the right mechanisms? Conference Paper presented at the *9th CABRI Annual Conference for Senior Budget Officials*, Nairobi, August, 2013. Available: <http://www.cabri-sbo.org/resources/publications/reports/760-exploring-the-missing-links-in-public-financial-management-reforms-9th-annual-seminar.pdf> (8-9).

Lawson, A. 2015. *Public Financial Management*. GSDRC Professional Development Reading Pack no. 6. Birmingham, UK: GSDRC, University of Birmingham.

Lazaraton, A., and Taylor, L. 2007. Qualitative research methods in language test development and validation. In Fox et al. (Eds.), *Language Testing Reconsidered* (113-130). Ottawa: University of Ottawa Press.

Leedy, P. D. 1993. *Practical Research: Planning and Design*. 5th ed. New York: Macmillan Publishing Company.

Levers, C., Müller, D., Erb, K., Haberl, H., Jepsen, M. R., Metzger, M.J., Meyfroidt, P., Plieninger, T., Plutzer, C., and Stürck, J. J. R. E. C. 2018. Archetypal patterns and trajectories of land systems in Europe. 18(3):715-732.

Lungu, G. F. 1997. *Public Administration notes*. Bellville: University of the Western Cape.

Maani, K. E. 2011. System Dynamics and Organizational Learning; *Complex Systems in Finance and Econometrics*, in RA Meyers (ed.), Springer New York, 738-52.

Maani, K. E., and Cavana, R. Y. 2002. *System thinking and modelling; Understand change and complexity*, Prentice Hall.

Maani, K. E., and Cavana, R. Y. 2007. *System thinking, system dynamics; managing change and complexity*, Pearson education, Rosedale New Zealand.

- Magliocca, N. R., Ellis, E. C., Allington, G. R., De Bremond, A., Dell'Angelo, J., Mertz, O., Messerli, P., Meyfroidt, P., Seppelt, R. and Verburg, P. H. 2018. Closing global knowledge gaps: producing generalized knowledge from case studies of social-ecological systems. *Global environmental change*, 50, 1-14.
- Maguire, M., and Delahunt, B. 2017. Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3).
- Makwetu, K. 2019. Constitutional accountability for public resources: the role of the Auditor-General. *Stellenbosch Law Review*, 30(3), 318-332
- Manz, C. C., Houghton, J. D., Neck, C. P., Fugate, M. and Pearce, C. 2016. Whistle while you work: Toward a model of emotional self-leadership. *Journal of Leadership & Organizational Studies*, 23(4), 374-386.
- Marion, R., and Uhl-Bien, M. 2001. Leadership in complex organizations, *The Leadership Quarterly*, 12, 389-418.
- Mashego, T. R. 2015. *Evaluation of the level of community participation in the implementation of the Indigent Exit Strategy as a poverty alleviation measure in the City of Tshwane* (Doctoral dissertation).
- Maxwell, J. A. 2012. *Qualitative research design: An interactive approach*. London: Sage.
- McCleskey, J. A. 2014. Situational, Transformational, and Transactional Leadership and Leadership Development. *Journal of Business Studies Quarterly*, 5, 117-130.
- McMillan, J. H., and Schumacher, S. 2010. *Research in education - Evidence-based inquiry*. 7th ed. International Edition. Boston: Pearson Education Inc.
- McNamara, T. 2001. Language assessment as social practice: Challenges for research. *Language Testing*, 18(4), 333-349.
<http://dx.doi.org/10.1177/026553220101800402>.

Meadows D. H., Meadows D. L., and Randers J. 1992. *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future*. Earthscan: London.

Meadows, D. H. 1999. *Leverage points: Places to intervene in a system*.

Meadows, D. H., Meadows, D. L., Randers, J. and Behrens III, W. W. 1972. The limits to growth-club of Rome.

Mella, P., and Gazzola, P. J. K. 2018. Improving managers' intelligence through Systems Thinking. 48(1):58-78.

Merriam, S. B. 1988. *Case study research in education: A qualitative approach*. Jossey-Bass.

Messerli, P., Oberlack, C., Tejada, L., Rist, S. and Giger, M. 2016. Sustainable livelihoods in the global land rush? Archetypes of livelihood vulnerability and sustainability potentials. *Global environmental change*, 41,153-171.

Mills, A., Durepos, G., and Wiebe, E. 2010. 15. *Encyclopedia of Case Study Research*, Volumes I and II. Mills, A. J., Durepos, G., and Wiebe, E. (Eds.) 2010. Thousand Oaks, CA: Sage.

Moeti, K., Khalo, T., Mafunisa, J, Nsingo, S., and Makhondo, T. 2007. *Public Finance Fundamentals*. Pretoria: Juta.

Molineux, J. 2018. Using action research for change in organizations: processes, reflections and outcomes, *Journal of Work-Applied Management*, 10(1), 19-34. <https://doi.org/10.1108/JWAM-03-2017-0007>.

Morecroft, J. 2008. System dynamics, RBV, and behavioural theories of firm performance: lessons from People Express. In *The International Conference of the System Dynamics Society*, July 2008.

Morecroft, J. 2010. System Dynamics, in M Reynolds & S Holwell (eds), *Systems Approaches to Managing Change: A Practical Guide*, Springer, London - Dordrecht - Heidelberg - New York, (pp. 25–86).

- Mosekilde, E., and Laugesen, J. L. 2007. Nonlinear dynamic phenomena in the beer model. *System Dynamics Review: The Journal of the System Dynamics Society*, 23(2-3), 229-252.
- Mumvuma, T. 2016. Enhancing Service delivery at the local level in Zimbabwe: Challenges and Future prospects. *Local Governance, Economic Development and Institutions*, .64-85. Springer.
- Musgrave, R. A. 1959. *The theory of public finance; a study in public economy*. Kogakusha Co.
- Myers, M. D. 2013. *Qualitative research in business and management*. Sage.
- Naidoo, G. 2017. *Leadership and Governance for a Sustainable public service. The case for selected South African Public service organisation*. PhD University of Pretoria.
- National Treasury, Republic of South Africa. 2000. *Guide for Accounting Officers. Public Finance Management Act*. Pretoria: National Treasury.
- National Treasury, Republic of South Africa. 2005. *Guidelines for Legislative Oversight through Annual Reports*. Pretoria: National Treasury.
- National Treasury, Republic of South Africa. 2007. *Medium-Term Expenditure Framework: Treasury Guidelines for 2007*. Pretoria: National Treasury.
- National Treasury, Republic of South Africa. 2011. *Revenue and Expenditure trends*. Pretoria: National Treasury.
- Ndreu, A. 2016. The definition and importance of local governance. *Social and Natural Sciences Journal*, 10(1).
- Neuman, W. L. 2007. *Basics of Social Research Methods: Qualitative and Quantitative Approaches*. 2nd ed. Allyn and Bacon, Boston.
- Ngai, E. W., Hu, Y., Wong, Y. H., Chen, Y. and Sun, X. J. 2011. The application of data mining techniques in financial fraud detection: *A classification framework and an academic review of literature*. 50(3): 559-569.

Nkuna, N. W., and Sebola M. P. 2012. Public administration theoretical discourse in South Africa and the developmental local government: A need to go beyond modern thinking. *Journal of Public Administration*, 47 (Special issue 1): 68-87.

Nyamita, M. O., Dorasamy, N., and Garbharran, H. L. 2015. A review of public sector financial management reforms: An international perspective. *Public and Municipal Finance*, 4(2), 25-37.

Oberlack, C., Sietz, D., Burgi Bonanomi, E., De Bremond, A., Dell' Angelo, J., Eisenack, K., Ellis, E. C., Epstein, G., Giger, M., Heinemann, A., Kimmich, C., Kok, M. T. J., Manuel-Navarrete, D., Messerli, P., Meyfroidt, P., Vaclavik, T., and Villamayor-Tomas, S. 2019. Archetype analysis in sustainability research: meanings, motivations, and evidence-based policy making. *Ecology and Society*, 24(2), 26. <https://doi.org/10.5751/ES-10747-240226>.

Owusu, F. Y. 2006. On Public Organizations in Ghana: What Differentiates Good Performers from Poor Performers? *African Development Review*, 18(3), 471-485.

Owusu, F. Y. 2012. Organizational culture and public sector reforms in a post-Washington consensus era: Lessons from Ghana's good reformers, *Progress in Development Studies*, 12(2/3), 135-151.

Pauw, J. C., Woods, G., Van der Linde, G. F. A., Fourie, D. J. and Visser, C. B. 2009. *Managing public money: A system from the South*. Johannesburg: Heinemann.

Perry, J. L. 1989. Handbook of public administration. London: Jossey-Bass.

Pessoa, M., and Pimenta, C. Eds. 2016. Public Financial Management in Latin America. *The key to Efficiency and Transparency*. pp. 403. Inter-American Development Bank. DOI: <https://doi.org/10.5089/978159782268>.

Peterson, S. B. 2011. Plateaus not summits: Reforming public financial management in Africa, *Public Administration & Development*, 31(3), 205-213.

Polidano, C. 1999. *The new public management in developing countries: Institute for Development Policy and Management*, University of Manchester, Manchester, UK.

Rabbinge, R., Leffelaar, P. A., and Van Latesteijn, H. C. 1994. The role of systems analysis as an instrument in policy making and resource management, in P Goldsworthy & FP de Vries (Eds), *Opportunities, use, and transfer of systems research methods in agriculture to developing countries*, Kluwer academic publishers, Dordrecht, vol. 3, 67-80.

Rahman, M. S. 2020. The advantages and disadvantages of using qualitative and quantitative approaches and methods in language “testing and assessment” research: A literature review.

Reddy, K. S., Nangia, V. K., and Agrawal, R. J. J. 2013. Indian economic-policy reforms, bank mergers, and lawful proposals: The ex-ante and ex-post ‘lookup’. 35(4):601-622.

Republic of South Africa. 1998. *Constitution of South Africa, 1996*. Pretoria: Government Printer.

Republic of South Africa. 1998. *Local Government: Municipal Demarcation Act 27 of 1998*. Pretoria: Government Printer.

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

Republic of South Africa. 1998. *White Paper on Local Government*. Pretoria: CTP Book Printer.

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

Republic of South Africa. 2003. *Municipal Finance Management Act 56 of 2003*. Pretoria: Government Printer.

- Reynolds, M. 2007. Evaluation Based on Critical Systems Heuristics, in Williams B & Imam I (eds), *Systems Concepts in Evaluation; An Expert Anthology*, Edge Press of Inverness, Point Reyes, California, 1 pp. 01-22.
- Reynolds, M., & Holwell, S. (eds) 2010. *Systems Approaches to Managing Change: A Practical Guide*. Springer, London.
- Rhodes, R. A. W. 2003. *Understanding Governance. Policy Networks, Governance, Reflexivity and Accountability*. Philadelphia. United States. Open University Press.
- Richardson, G. P. 2011. Reflections on the foundations of system dynamics. *System dynamics review*, 27(3), 219-243.
- Richmond, B. 2001. *An Introduction to Systems Thinking, High Performance Systems*, Hanover, New Hampshire.
- Richmond, B. 1993. Systems thinking: critical thinking skills for the 1990s and beyond. *System dynamics review*, 9(2), 113-133.
- Rindfuss, R. R., Walsh, S. J., Turner, B. L., Fox, J. and Mishra, V. 2004. Developing a science of land change: challenges and methodological issues. *Proceedings of the National Academy of Sciences*, 101(39), 13976-13981.
- Ríos, J. P. 2010. Models of organizational cybernetics for diagnosis and design. *Cybernetics*.
- Ritchie, J., Lewis, J. and Elam, R. G. 2013. *Selecting samples*. Qualitative research practice: A guide for social science students and researchers, 111.
- Robinson, D., Hewitt, T. and Harriss, J. eds., 2000. *Managing development: Understanding inter-organizational relationships*. Sage.
- Rodriguez-Ulloa, R and Paucar-Caceres, A. 2005. Soft System Dynamics Methodology (SSDM): Combining Soft Systems Methodology (SSM) and System Dynamics (SD), *Systemic Practice and Action Research*, 18(3): 303-34.

- Rodríguez-Ulloa, R., Montbrun, A. and Martínez-Vicente, S. 2011. Soft System Dynamics Methodology in Action: A study of the Problem of Citizen Insecurity in an Argentinean Province, *Systemic Practice and Action Research*, 24(4): 275-323.
- Ross, D. A., and Wade, J. P. 2015. A definition of systems thinking: a systems approach. *Proc Comput Sci*. 44: 669–78. doi: 10.1016/j.procs.2015.03.050.
- Rozenfeld, I. 1975. *Süsteemanalüüs, Eesti Raamat*, Tallinn.
- Sadowski, P. 1999. *Systems Theory as an Approach to the Study of Literature: Origins and Functions of Literature*, E. Mellen Press, Lewiston, N.Y.
- Sallee, M. W., and Flood, J. T. 2012. Using qualitative research to bridge research, policy, and practice. *Theory Into Practice*, 51(2), 137-144. <http://dx.doi.org/10.1080/00405841.2012.662873>.
- Samuels, A. 2008. *New developments in the post-Jungian field*. The Cambridge Companion to Jung, .1.
- Schaffernicht, M. 2006. Modifying the Beer Game to make its dynamic structure more salient.
- Schein, E. 1996. Culture: The missing concept in organization studies, *Administrative Science Quarterly*, 41, 229-40.
- Schenker-Wicki, A., Schoenenberger, L. K. 2015. Can system dynamics learn from social network analysis? University of Zurich, Institute of Business Administration, *UZH Business Working Paper*, (349).
- Schreiber, C. and Carley, K. M. 2007. Agent interactions in construct: An empirical validation using calibrated grounding.
- Schwaninger, M. 2006. Design for viable organizations: The diagnostic power of the viable system model.

- Schwaninger, M. and Ríos, J. P. 2008. System dynamics and cybernetics: a synergetic pair. *System Dynamics Review: The Journal of the System Dynamics Society*, 24(2), 145-174.
- Senge, P. M. 1990, 2006. *The Fifth Discipline: The Art and Practice of the Learning Organization*. New York, Doubleday/Currency.
- Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B. and Smith, B. J. 1994, *The Fifth Discipline Field-book. Strategies and Tools for Building a Learning Organization*, Doubleday, New York - London - Toronto - Sydney - Auckland.
- Senge, P. M., and Sterman, J. D. 1992. Systems thinking and organizational learning: Acting locally and thinking globally in the organization of the future. *European Journal of Operational Research*, 59(1):137-150.
- Senge, P. M. 2004. *Five disciplines*. NY: Doubleday.
- Setianto, A. N. 2014. *Systems Thinking Approach to develop small holders farming in Rural Java, Indonesia*. *Public Management*, 25(12).
- Shafritz, J. M., Hyde, A. C., and Parkes, S. J. 2004. *Classics of Public Administration*, 5th ed. Belmont: Thomson Wadsworth.
- Shall, A. 1999. *Budget Reform: An Evaluation of the Implementation of Performance Budgeting in the Department of Health, Mpumalanga*. Rondebosch: Applied Fiscal Research Centre.
- Shokane, M., Stanz, K., and Slabbert, J. M. 2004. Description of leadership in South Africa: *Organisational context perspective*, 2(3):1-6.
- Siddle, A, and Koelble, T. A. 2019. *The Failure of Decentralisation in South African Local Government*, Cape Town, UCT Press.
- Sietz, D., Ordoñez, J. C., Kok, M. T. J., Janssen, P., Hilderink, H. B. M., Tittonell, P. and Van Dijk, H. 2017. Nested archetypes of vulnerability in African drylands: where lies potential for sustainable agricultural intensification? *Environmental Research Letters*, 12(9): 095006.

Silverman, D. 2010. *Qualitative research*. London: Sage.

Singer, A., Sillitto, H., Bendz, J., Chroust, G., Hybertson, D., & Lawson, H. B. *et al.* 2012. The Systems Praxis Framework. Proceedings of the *IFSR Conversation*. St. Magdalena, Linz, Austria. Available: <http://www.ifsr.org/index.php/the-systems-praxis-framework-ifsr-conversations-2012>

Siswana, B. 2007. *Leadership and Governance in the South African Public Service: An Overview of the Public Finance Management System*. PhD Thesis, University of Pretoria Available: <http://repository.up.ac.za/bitstream/handle/2263/28035/chapter4.pdf> (Accessed 25 June 2021).

South African Development Community (SADC). 2017. *History and Treaty*. Available: <https://www.sadc.int/about-sadc/overview/history-and-treaty/> (Accessed 03 March 2020).

South African Development Community (SADC). 2020. *Member States*. Available: <https://www.sadc.int/member-states/> (Accessed 03 March 2020).

South African Development Community (SADC). 2019. *SADC Objectives*. Available: <https://www.sadc.int/aboutsadc/overview/sadc-objective/> (Accessed 2 September 2019).

South African Institute of Chartered Accountants (SAICA). 2010. *About SAICA*. Available: <https://www.saica.co.za/About/tabid/56/language/en-ZA/Default.aspx> (Accessed 24 June 2019).

South African Local Government Association (SALGA). 2010. Local government leading the fight against corruption, Paper Presented at the *SALGA National Conference*, South Africa, 29th August to 01st September 2011, Available: <http://salga.org.za/app/webroot/assets/files/Presentations/Local%20Government%20Leading%20the%20Fight%20Against%20Corruption.pdf> (Accessed 23 August 2019).

Sterman, J. 2014. Interactive web-based simulations for strategy and sustainability: the *MIT Sloan Learning Edge management flight simulators, Part I*. 30(1-2): 89-121.

Sterman, J., and Rahmandad, H. 2013. *Introduction to Systems Dynamics*. 15.871. Fall 2013. Massachusetts Institute of Technology: MIT Open Courseware, <https://ocw.mit.edu>. License: Creative Commons BY-NC-SA.

Sterman, J. D. 2000. *Business Dynamics: System Thinking and Modelling for A Complex World*, Irwin McGraw-Hill, New York.

Strauss, A., and Corbin, J. J. G. T. 1990. *Qualitative research*.

Tedeschi, L. O., Nicholson, C. F., & Rich, E. 2011. Using System Dynamics modelling approach to develop management tools for animal production with emphasis on small ruminants, *Small Ruminant Research*, 98(1-3), 102-10.

Thomson, S. B. 2011. Qualitative research: Validity. *JOAAG*, 6(1), 77-82

Thornhill, C., and Cloete, J. 2014. *South African Municipal Government and Administration*, Pretoria: Van Schaik.

Tichy, N. M. and Devanna, M. A. 1986. The transformational leader. *Training & Development Journal*.

Tilley, E. 2014. *Compendium of sanitation systems and technologies*. Eawag.

Tkachenko, L. 2020. Public Finance Challenges and Opportunities, *Athens of Journal of Business and Economics*, 6: 73-98, Athens Institute for Education and Research. <https://doi.org/10.30958/ajbe.6-1-4>.

Tsheletsane, I., and Fourie, D. 2014. *Factors hindering public financial management and accountability in South Africa*. Semantic Scholar.

Tshiyoyo, M. M. 2012. *Leadership and governance imperatives for development in the Democratic Republic of the Congo* (Doctoral dissertation, University of Pretoria).

- Tuohy, D., Cooney, A., Dowling, M., Murphy, K., & Sixsmith, J. 2013. An overview of interpretive phenomenology as a research methodology. *Nurse Researcher*, 20(6), 17-20. <http://dx.doi.org/10.7748/nr2013.07.20.6.17.e315>
- Turner, B. L., Wuellner, M., Nichols, T., Gates, R., Tedeschi, L. O., and Dunn, B. H. 2017. A systems approach to forecast agricultural land transformation and soil environmental risk from economic, policy, and cultural scenarios in the north central United States (2012–2062). *International Journal of Agricultural Sustainability*, 15(2):102-123.
- Uhl-Bien, M., and Arena, M. 2017. Complexity Leadership: Enabling people and organizations for adaptability, *Organizational Dynamics*, 46(1), 9-20. 89-104.
- Uhl-Bien, M., Marion, R., and Mckelvey, B. 2008. Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era, *The Leadership Quarterly*, 18, 298–318.
- Ulrich, W. and Reynolds, M. 2010. Critical systems heuristics. In: Reynolds, Martin and Holwell, Sue eds. *Systems Approaches to Managing Change: A Practical Guide*. London: Springer, pp. 243–292.
- Ulrich, W. 1993. Some difficulties of ecological thinking, considered from a critical systems perspective: A plea for critical holism', *Systemic Practice and Action Research*, 6(6), 583-611.
- Ulrich, W. 2002. *A mini-primer of critical systems heuristics*. Werner Ulrich's Home Page, 1-4.
- Ulrich, W., and Reynolds, M. 2010. Critical Systems Heuristics. In: Reynolds M., Holwell S. (eds) *Systems Approaches to Managing Change: A Practical Guide*. Springer, London.
- United Nations Habitat (UN-HABITAT). 2004. *72 Frequently Asked Questions about Participatory Budgeting*, United Nations Human Settlements Programme (UNHABITAT), Nairobi.

Van der Waldd, G. and Du Toit, D. F. P. 2018 *Managing for excellence in the public sector*. 2nd ed. Cape Town: Juta.

Van der Waldd, G. 2018. *Municipal Management*. Juta, Limited.

Van der Waldd, G., Khalo, T., Nealer, E., Phutiagae, K., van der Walt, C., van Niekerk, D., and Venter, A. 2014. *Municipal Management: Serving the people*. Claremont: Juta & Company Ltd.

Van der Walle, S., & Hammerschmid, G. 2011. The impact of the New Public management: Challenges for coordination and cohesion in European Public Sector. *Halduskultuur*, 12(2), 190-209.

Van Maanen, J., 1979. Qualitative methodology. *Administrative Science Quarterly Ithaca, NY*, 24(4), 519-671.

Visser, C. B. and Erasmus, P. W. 2013. *The management of public finance*. McGillivray Ed. 10th ed. Cape Town, South Africa: Oxford University Press Southern Africa.

Visser, C. B. and Erasmus, P. W. 2002. *The Management of Public Finance, a practical guide*. Oxford Press, Cape Town.

Visser, M. 2000. System dynamics and group facilitation: contributions from communication theory, *System Dynamics Review*, 23(4), 453-63.

Von Bertalanffy, L. 1950. An Outline of General System Theory, *The British Journal for the Philosophy of Science*, 1(2), 134-65.

Von Hagen, J. 2005. Budgeting institutions and public spending, In: Shah, A, (Ed.), *Public sector governance and accountability series, Fiscal Management*. Washington DC: The World Bank.

Vys-Doorgapersad, S. 2007. *Municipal Financial Management: Serving the People*. Juta and Company Ltd.

Wardropper, C. B., Gillon, S., Mase, A. S., McKinney, E. A., Carpenter, S. R., and Rissman, A. E. 2016. Local perspectives and global archetypes in *scenario development*. 21(2).

Waterman, H., Tillen, D., Dickson, R. and De Koning, K. 2001. Action research: a systematic review and guidance for assessment. *Health technology assessment*, 5(23), 1-166.

Wolstenholme, E. F. 2003. Towards the definition and use of a core set of archetypal structures in system dynamics. *System Dynamics Review*, 19(1), 7-26.

Wolstenholme, E. F. 2004. Using generic system archetypes to support thinking and modelling. *System Dynamics Review: The Journal of the System Dynamics Society*, 20(4), 341-356.

Wong, J. W., and Chan, G. 2016. Real-time locating systems applications in construction. *Automation in Construction*, 63, 37-47.

Woodhouse, D. 1997. *In pursuit of good administration*. Oxford: Oxford University.

Yukl, G. 1999. An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The leadership quarterly*, 10(2), 285-305.

ANNEXURES

Annexure A: Gatekeeper's Letter



KWAZULU-NATAL PROVINCE

COOPERATIVE GOVERNANCE AND

Private Bag X9078, PIETERMARITZBURG, 3200

Natalia Building, 330 Langalibalele Street, Pietermaritzburg, 3200

Tel: 033 395 2305 Fax: 033 395 2489

HUMAN RESOURCE ADMINISTRATION

Enquiries: Advocate KL Janse van Renburg

TRADITIONAL AFFAIRS
REPUBLIC OF SOUTH AFRICA

DIRECTORATE:

Mr. F L Ntuli

Lecturer: Department of Public Management & Economics
Durban University of Technology

M L Sultan Campus
Durban 4001

Dear Mr Ntuli

RE: REQUEST FOR PERMISSION TO COLLECT DATA

1. Your letter dated 20 April 2021 and subsequent communication bear reference.

2. Please be advised that I, the Accounting Officer and therefore Gatekeeper for the Department of Cooperative Governance and Traditional Affairs in the Province of KwaZulu-Natal hereby permit you to conduct research and collect data in the Department pertaining to the public financial management system dynamic embedded in current practice in the Department.
3. You are obliged to abide by the rules and regulations governing the public service and respect the Department's right to confidentiality. You must undertake not to use the data collected for any purpose other than

to support your study. All requests for information must be directed to the Chief Financial Officer, Ms Y Joyi for her attention.

I wish you every success with your study and hope that the department can be of assistance in your data collection process.

Yours faithfully

MR Y. TUBANE

HEAD OF DEPARTMENT
COOPERATIVE GOVERNANCE & TRADITIONAL AFFAIRS

29/6/21

DATE

GROWING KWAZULU-NATAL TOGETHER

Annexure B: Research Ethics (FRC)



MANAGEMENT SCIENCES: FACULTY RESEARCH ETHICS COMMITTEE (FREC)

13 June 2017

Student No: **20302943**

FREC No: **71/16FREC**

Dear MR L.F NTULI

DOCTOR OF PHILOSOPHY: MANAGEMENT SCIENCES (Leadership & Complexity)
TITLE: LEADERSHIP CAPABILITIES FOR IMPROVING FINANCIAL MANAGEMENT
INEFFICIENCIES IN THE PUBLIC SECTOR

Please be advised that the **FREC** Committee has reviewed your proposal and the following decision was made: Ethical Level 2

Approval has been granted for a period of two years, after which you are required to apply for safety monitoring and annual recertification. Please use the form located at the Faculty. This form must be submitted to the FREC at least 3 months before the ethics approval for the study expires.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the FREC according to the FREC SOP's. Please note that ANY amendments in the approved proposal require the approval of the FREC as outlined in the FREC SOP's.

Yours Sincerely



Prof J Govénder

Chairperson: FREC

Annexure C: Research Instruments

Boundary Issues	Root Issues	Main questions	Response Output (fill in Answer here)
Source of Motivation	What are the motivating factors?	Who is (ought to be) the client or beneficiary of public financial and resource management?	
		What is (ought to be) the purpose of managing public finances in Municipalities?	
		That is, what are (should be) the consequences of financial mismanagement and measure the measure of improvement to public financial management?	
Source of Control	Who is in control?	Who is (ought to be) the decision-maker in evaluations on financial management and service delivery?	
		What resources and other conditions of success are (ought to be) controlled by the decision-maker in financial management issues?	
		What conditions of success are (ought to be) part of decision environment which can attribute to financial mismanagement?	
Source of Knowledge	What information and skills are relevant?	Who is (ought to be) considered a professional or further expert in the execution of financial management?	
		What kind of expertise is (ought to be) consulted with to address the inefficiencies of financial management?	
		What or who is (ought to be) assumed to be the guarantor of success in the provisioning of services?	

Source of Legitimacy	What stakeholders should be considered?	Who is (ought to be) witness to the interest of those affected but not involved in public financial management?	
		That is, who (should be) treated as a legitimate stakeholder, or those stakeholders who cannot speak for themselves, including future generations and non-human nature?	
		What secures (ought to be) the emancipation of those affected from the premises and promises of those involved in financial management? That is where does (should) legitimacy lie in leadership positions?	

Annexure D: Editor's Letter

Helen Richter
Advanced Editing, Proofreading
& Copy writing

helenrictor@gmail.com
072 96381159

26 September 2022

To whom it may concern:

CERTIFICATE OF EDITING & AUTHENTICATION

I have proofread and language edited corrections to the following PhD dissertation titled:

**"Leadership Capabilities for improving Financial Management inefficiencies
in the Public Sector"**

By

Fanyana Ntuli

The work remains the author's own work, to the best of my knowledge, and is free of spelling, grammar, and structural and stylistic errors.

With thanks

H. S. Richter (Ms)
