



**The nexus between project management and service delivery in the  
eThekwini Municipality**

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## **Abstract**

Service delivery is placed as the main function of municipalities in Section 152 of the South African Constitution. However, municipalities generally struggle to deliver public services efficiently. As a result, municipalities typically endure ongoing pressure to enhance service delivery and make prudent decisions with integrity and transparency. One of the reasons for service delivery challenges across South African municipalities is the lack of proper and effective project management. Generally, municipalities struggle to implement projects that harmonise national government policies and procedures. This study explores the nexus between project management and public service delivery using a case study of the eThekweni Metropolitan Municipality. A qualitative methodological approach was adopted to address the research questions raised in the study. Semi-structured interviews were used to collect qualitative data from 30 workers at the eThekweni Municipality. The thematic data analysis approach was adopted to analyse data. The study found that, there is a relationship between project management and service delivery, there are gaps in the link between project management and service delivery, whilst document reviews established that policies in place are not reviewed and are mostly implemented as drafts. Seven key challenges of project management in the eThekweni Municipality were identified and their impact, as well as recommendations to improve service delivery in the municipality. It is recommended that there is need for ethical leadership in addressing project management and service delivery challenges in local government. Ethical leadership ensures transparency and accountability in project management and service delivery.

## **Declaration by student**

In accordance with the rules of the Durban University of Technology, I declare that this dissertation is my own work. I further declare that it has never been submitted for assessment of a degree to another university or for another qualification.

Student's signature:

## **Dedication**

This dissertation is dedicated to my late mother Jabu Ma Cele - Gasa “Ntomb’bomvana” and my late father Jabulani Gasa “Mjay Lento Indoda Ebushelelezi” whose words of encouragement and push for tenacity still ring in my ears. This is your “mbhegana” mfethu. My late grandmothers Bettina MaDlamini - Cele “Gogowabantwana” and Bettina Ma Ngubane “Intombi eyashaya inkomo yabh

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## **List of acronyms**

BEE	Black Economic Empowerment
BRT	Bus Rapid Transport
CBP	Community Based Programme
CDW	Community Development Workers
COGTA	Cooperative Governance and Traditional Affairs
COVID-19	Coronavirus disease of 2019
DSW	Durban Solid Waste
EWS	eThekweni Water Services
ICT	Information Communication Technology
IDASA	Institute for Democratic Alternatives in South Africa
IDP	Integrated Development Plan
IPTN	Integrated Public Transport Network
JIPSA	Joint Initiative on Priority Skills Acquisition
LED	Local Economic Development
LGTA	Local Government Transitional Act
LUMS	Land-Use Management System
MDB	Municipal Demarcation Board
MFMA	Municipal Finance Management Act
MS	Microsoft
OSS	Operation Sukuma Sakhe

PERT	Project Evaluation and Review Technique
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PPP	Public Private Partnerships
RET	Radical Economic Transformation
SALGA	South African Local Government Association
SDP	Spatial Development Plan
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WBS	Work Breakdown Structures

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the study

South Africa is a unitary state with three spheres of government (i.e., the national, provincial, and local governments). These three spheres continue to face alteration processes in terms of governance systems. The alteration processes have seen the emergence of various legislations, policies, projects, and programmes that aim to enhance service delivery (Christensen and Laegreid 2021). While the national and provincial governments are mostly responsible for developing policies, the local government sphere is mainly responsible for policy implementation and service delivery. To promote efficiency and effectiveness in service delivery, policies like the Integrated Development Planning (IDP) exist in the local government. This policy provides a process through which local governments (also called municipalities) prepare strategic development plans for a five-year period (Van Der Waldt 2016). The IDP acts as the fundamental planning instrument for each municipality within its project management activities. More precisely, the IDP is the principal guideline for municipal decision-making, planning and development and is critical in project management assessment.

Prior to democracy, the anti-apartheid resistance included the demand for participatory planning, and not just a unilateral process (Christensen and Laegreid 2021). The Local Government Transitional Act (LGTA of 1993) was the source of new planning in South Africa. This Act was amended in 1996 and paved the way for the concept of developmental planning in the country. The LGTA (Act 97 of 1998) considers IDP preparations a legal requirement for municipal councils in South Africa. This is additionally reiterated in the White Paper on Municipality (2016), which stipulates that the IDP must be a mechanism for advancing and regulating local government participative and performance management systems in municipalities (Christensen

and Laegreid 2021).. The IDP must be prepared in such a way that it runs with the term of office of each municipality's council. It is incumbent upon the new council to either adopt the IDP of the previous council or to develop a new one to achieve its own policy objectives (eThekwini Municipality 2019)

Generally, service delivery is the most critical function of local government in South Africa. According to van der Waldt (2016), a notable expansion in the quality and scope of service delivery is not possible within traditional approaches and settings in the country. To promote efficiency and effectiveness in municipal service delivery, local authorities need to adopt and implement sound project management practices. In the past, it was necessary to enhance local government's ability to manage projects in order to gain better performance and reliability (Van der Waldt 2016). Good project administration should be utilised to achieve municipal service delivery goals in collaboration with institutional growth, governance, and conformance according to eThekwini Municipality Annual Report (EMAR 2021). However, risks such as those based on service delivery and economic development continue to be problematic in South Africa. On the other hand, it should be noted that many South African municipalities have in terms of establishing good governance. Accountability in the local government essentially transforms the socioeconomic realities of communities (IDP 2021). The eThekwini Metropolitan Municipality is on the east coast of South Africa, in the Province of KwaZulu-Natal (KZN). The Central Municipal Planning Region, South Municipal Planning Region, West Municipal Planning Region, and North Municipal Planning Region are its four functional areas. The Umgeni River, the Umlazi River, and the Kloof Ridge serve as these areas' catchment-based functional borders (eThekwini Municipality 2019). The municipality provides various services to residents within its area, regardless of the diverse spatial distribution. Key services, among many others, provided by the municipality include water and sanitation, electricity, solid waste collection and management, transport and communication, social facilities and infrastructure development (eThekwini Integrated Development Plan 2019).

## 1.2 Problem statement

South African municipalities are generally challenged with proper project management and efficient public service delivery. Municipalities in South Africa should promote Local Economic Development (LED) as a National Key Performance Area (Landsman 2020). Public institutions generally face constant pressure from all stakeholders for improvements in service delivery, sound decision-making, acceptable performance in projects, as well as integrity and transparency in administration and operations (Larson 2015). Evidence exists that very few development projects undertaken by municipalities are successful, while many of them are successful. The eThekweni municipality achieved various projects such as Bridge city, Sukhuma sakhe and Gateway interchange project (EMAR 2021). Municipalities generally face challenges in harmonising national government procedures and policies through projects (Pilkaite and Chmieliauskas 2015). Consequently, South African local governments generally fail to deliver public services in line with national government goals (Cloete 2021). Since public service delivery is the core mandate of municipalities, project management failures directly affect the greater well-being of communities and society as a whole. Municipalities are predominantly appraised based on the level of service delivery and success rate of project management. When municipal service delivery projects fail, the National Development Plan (NDP) goals of the national government are significantly affected. Thus, such failures generally affect the national growth and development initiatives of the country (Cloete 2021). The eThekweni Municipality also continues to experience backlogs in service delivery, the current backlog for the provision of housing was over 380 000 houses, sanitation, there is a backlog of about 123 394 household units, water services, there is a backlog of about 20 345 household units, while roads have a backlog of about 1 046 km with a delivery range of between 10 and 15 km per annum. (eThekweni Municipality 2019). These backlogs can be cleared in 70 to 105 years to clear all backlogs (eThekweni Municipality 2020). Therefore, the study was based on the nexus between project management and service delivery in the eThekweni Municipality.

### **1.3 Aim of the study**

The aim of this study is to explore the link between project management and service delivery in South Africa, using a case study of the eThekweni Metropolitan Municipality. This aim is achieved by satisfying the following three objectives:

- i. To examine the project management challenges experienced in the eThekweni Metropolitan Municipality,
- ii. To examine the impact of the identified project management challenges on service delivery in the eThekweni Municipality, and
- iii. To recommend possible solutions to the identified project management and service delivery challenges in the eThekweni Municipality.

### **1.4 Research questions**

- i. What are the project management challenges commonly experienced in the eThekweni Metropolitan Municipality?
- ii. How do these challenges impact service delivery in the municipality?
- iii. What are the possible solutions to the service delivery challenges in the municipality?

### **1.5 Significance of the study**

The study assesses the leadership obstacles associated with the governance of projects in the eThekweni Municipality. Thus, it recommends governance arrangements that can be adopted to monitor and manage municipal projects linked to public service delivery. Generally, the recommendations provided in the study guide on the timing of governance interventions during public projects, thus mitigating the common challenges encountered during the different phases of project management. In doing this, the study provides possible solutions to leadership challenges that are generally associated with the governance of public projects at the local government

level. Recommendations from the study are useful towards local government policy making and procedure development. This study should help municipalities uncover areas for improvement and provide them with the autonomy to assess the effects of the services they offer to their residents. In addition, the study assists local authorities in infrastructure development, which is essential in the South African local government framework where emphasis is increasing on project implementation and the effective coordination of service delivery policies. As such, the study plays a significant role in enhancing the governance of major local government projects. Thus, it guides the purposeful alignment of projects, the dispersion of decision-making authority, the swift allocation of resources and the integration of external stakeholders.

### **1.6 Organisation of the study**

The rest of this study is organised into four (4) chapters. Chapter 2 presents a review of the theoretical and empirical literature on project management and service delivery. Chapter 3 discusses the methodology used in the study. Chapter 4 discusses the data and reports on the findings of the study. Chapter 5 concludes the study, providing recommendations and areas for future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The provision of public services by municipalities continues to receive attention in the literature. Theories on public service provision have emerged, and empirical studies also continue to grow. Some traction is noted in studies that link project management to the municipal service delivery. This chapter provides a discussion of the relationship between project management and service delivery at municipal level. The chapter discusses some theories, empirical evidence and legislation that relate to project management and its link to municipal service delivery. To do this, the chapter is divided into three main sections. First, the chapter presents a discussion of some theories related to the link between project management and service delivery. Second, a discussion of the empirical literature on the role of project management in local government service delivery is presented. Finally, the chapter discusses some of the legislation and policies that guide project management and service delivery both in South Africa and in the eThekweni Metropolitan Municipality.

#### **2.2 Theoretical literature**

Literature contains a plethora of theories on project management and public service delivery. Some of the project management theories are explained in the Project Management Body of Knowledge (PMBOK) by the Project Management Institute (PMI). Project management theories are mainly divided into the theory of project and the theory of management. The former is unitary to the conversion of inputs into outputs, while the latter is further divided into the theory of planning, execution and

control. This section discusses the details around the theory of project and the theory of management, which are believed to underpin this study.<sup>1</sup>

### ***2.2.1 The theory of project***

Developed by Turner (1993), the theory of project was coined from the transformation view on operations which conceptualises a project as the transformation of inputs into outputs. The theory makes the assumption that tasks are distinct, constrained, and independent with little uncertainty about the requirements (apart from sequential linkages). Additionally, it presumes that work is captured by top-down decomposition of complete transformation and that initial needs can be broken down along with work. The theory suggests that a project is managed by means of principles which include transformation, establishing tasks, and independently minimising the cost of each task. In this case, transformation entails decomposing a project into manageable and well-understood tasks. These tasks should be efficiently and sequentially managed in order to achieve optimum results.

Literature provides evidence on the application and various advantages of the theory of project. The theory is beneficial to project managers as it improves the chances of getting the desired results (Silvius et al. 2017). It gives an efficient perspective on work to be done by structuring the work as a project and fitting it into the organisational strategy (Klaus-Rosinska 2019). It helps set the scope, schedule and budget for the work to be done (Klaus-Rosinska 2019; Silvius et al. 2017). However, the theory is criticised for not taking into full account the complexity and diversity of projects. This is because projects may vary from a one-day event to very large projects that require a significant number of resources and amount of time. Thus, the theory is often criticised for failing to encompass all variables in a project as well as the nature of the project. Sohi et al. (2019) argue that while projects are influenced by numerous variables, the human factor is the most unstable factor in a project, and there can be no prediction as to how it will act or react to each challenge in a project. In reality, there

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<sup>1</sup> A Guide to the Project Management Body of Knowledge (PMBOK Guide- Fourth Edition 2008)

are possibilities for numerous challenges such as problems in scheduling, security, interpersonal conflicts, accidents, and delays during the lifecycle of a project.

While some criticisms of the theory exist, the theory of project is still relevant in the literature. Sarker (2006) advocates that the theory is more relevant because municipal service delivery should be broken down into tasks that are sequentially arranged. The output for these tasks should meet the needs of the community. Municipalities are continuously engaged in very large projects, for example, installing new water pipes in new residential areas. These projects have inputs, processes and outcomes and should be sequentially and optimally managed. Guidelines highlighted in the theory of project can be essential in that regard. Equally, a lot of work done by municipalities have the same structure, thus most service delivery efforts can be best done as projects. Against this background, the theory is relevant to this study.

### ***2.2.2 The theory of management***

Developed by Fayol (1900), the theory of management analyses and synthesises the role of management in organisations. The theory divides management into five distinct elements, namely, forecasting and planning, organising, commanding, coordinating, and controlling. Following these five distinct elements, the theory is based on fourteen (14) principles. These principles are division of work, authority, discipline, unity of command, unity of direction, subordination, remuneration, centralisation, scalar chain, order, equity, stability, initiative, and team spirit. In this context, the theory focuses on the efficiency of the employees and on improving productivity using qualitative methods.

The theory of management is usually described as a classical theory in the literature. Classical theories of management are mostly criticised for ignoring human desires and needs and not taking into consideration human error in work performance. According to Sohi et al. (2019), classical theories are rigid and tough and do not allow for much human relations and individual creativity. The human relations movement theories must be incorporated to the classical theories of management in order for them to be more effective. One of these ideas is the behavioural theory, which concentrates on the psychological component of management and organisations by comprehending

that management is a continuous, dynamic process in which staff members must actively participate. As a result, Maslow (1943) expanded on Fayol's work under the theory of motivation, and McGregor (1950) added the theories of X and Y of management.

The original theory of management developed by Fayol (1900) and its subsequent improvements are essential in the context of this study. Pepinsky et.al (2017) explain that local governance requires the involvement of countless processes, limited resources, deadlines, limited finance, and numerous personnel. A proper plan needs to be adopted and carefully executed. Due to the magnitude of the tasks, control measures need to be in place for the successful completion of any project undertaken by municipalities. According to Betchoo (2015), municipal duties require near flawless planning as the lives they are responsible for do depend on the services they deliver. Given the magnitude and scope of the required tasks and the large quantity of resources that are channelled to meet the service delivery objectives, municipalities have to excel in organising as well as allocating resources. Service delivery also requires a large labour force, and the larger the labour force, the more coordination and control measures are required. With proper management principles, satisfactory service delivery is achievable (Betchoo 2015; Pepinsky et.al 2017).

### **2.3 Empirical literature**

Municipal project management and service delivery have both separately and collectively received attention in the empirical literature. Many studies have examined the role of project management and its challenges in municipal service delivery. On the other hand, studies on municipal service delivery mostly discuss the role of municipalities in public service provision, challenges experienced by municipalities, and ways through which such challenges can be addressed in the pursuit of efficiency in public service delivery. This section discusses some of the empirical literature on these two phenomena. First, the section discusses some of the empirical literature on municipal service delivery. Second, a discussion of some empirical literature on the relationship between project management and municipal service delivery in 2.3.2.

### **2.3.1 Municipal service delivery**

In most developing countries, municipalities are generally mandated with the provision of basic services to citizens and communities. Municipal services form the foundation for improved quality of life and are essential for both social welfare and local economic development (Reddy 2015). Basic services delivered by municipalities to communities include water, sanitation, electricity, transport, refuse and waste disposal, among others. In countries like South Africa, municipal failure to provide adequate public services will affect the social welfare of communities, mostly poor communities, and impede local economic development. Therefore, the South African Constitution (1996) legally mandates municipalities to provide public services to communities, to shield the poor from abject poverty and provide dignity to vulnerable citizens (Reddy 2015). The various ways through which municipalities can provide public services are contained in various government legislations.

The duty of South African municipalities entails the structuring, managing, administration and budgeting, as well as planning processes to give priority to the basic needs of the community, thus promoting social and economic development (South African Local Government Association or SALGA 2019). In addressing this goal, municipalities then provide basic services that have a direct and immediate effect on the quality of lives of the people in the communities that they serve (Lawrence and Rogerson 2019; Nel and Rogerson 2016). Municipal services refer to basic services that residents expect the government to provide in exchange for the rates and taxes that they pay.

South African municipalities can provide services to communities within their jurisdictions through internal and/ or external service delivery mechanisms. Internal service delivery mechanisms entail the provision of services through a unit or department within the municipality. At other times, communities corporatise by setting up a municipal business to deliver a public service (Rolland 2018). The business will be a member of the council, which is responsible for monitoring its operations. In such cases, the company may function more independently than a municipal department while acting under the overall control and supervision of the council. Such companies are registered as state-owned enterprises, and perfect examples include Johannesburg Water (SOC) Ltd, which provides water services on behalf of the City

of Johannesburg Metropolitan Municipality, and Pikitup Johannesburg (SOC) Ltd, which offers integrated waste management services to the same municipality.

On the other hand, external service delivery mechanisms entail contracting a third party to provide services on behalf of the municipality. The most effective ways of external service delivery include outsourcing the service to another municipality or municipal entity, outsourcing the service to an organ of state, commercialise service delivery by public-private partnerships (PPPs) or privatise service delivery (Overman and van Thiel 2016). External service delivery agreements usually involve a service provider undertaking to provide a municipal service within specific timeframes, budgets and targets. In that context, the service provider will be responsible for delivering a service either to the entire community or to a section of the community. The agreements may be in the forms of contracts, leases, or concessions (Rolland 2018).

While overly challenging, there have been several achievements in governance, accountability, capacity development, financial and administrative management, as well as public services across South African municipalities (State of the Cities Report 2011, COGTA 2016 annual review)<sup>2</sup>. A unified local government system has been designed and established from the fragmented, undemocratic, unaccountable, and racially divided system that was inherited from the apartheid era. Under the guidance of the Constitution (1996), a series of laws, policies, and support programmes to direct the establishment of municipalities as a distinctive, interrelated, and interdependent sphere of government have been implemented. Over the years, the South African local government has adopted initiatives that improve lives in the communities they serve. Notable initiatives include the Community Development Workers (CDWs), Batho Pele principles, and the Thusong Multipurpose Centres. CDWs were introduced by President Thabo Mbeki in 2009. The role of the community development workers (CDWs) was to bring government closer to the people. They gave people access to government services and relevant information that could lead to economic empowerment (COGTA 2009b). Through the Batho Pele principles of 1997, government aims to instil a culture of accountability and caring by public servants. The

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<sup>2</sup>. [https://www.cogta.gov.za/cgta\\_2016/wp-content/uploads/2022/01/21-Year-Review-First-Phase-PROBLEM-STATEMENT.pdf](https://www.cogta.gov.za/cgta_2016/wp-content/uploads/2022/01/21-Year-Review-First-Phase-PROBLEM-STATEMENT.pdf).

principles are a framework on how public services are provided, and specifically about improving the efficiency and effectiveness of the way in which services are delivered (COGTA, 2016). The programme had started in 2003 as a national initiative Multipurpose Community Centers (MPCCs), also known as Thusong Service Centers (TSCs), were first presented and constructed in 1999. The TSCs' main goal was to act as one-stop shops where residents of each community could easily access government services and information. Incorporating expertise into municipal sector through initiatives such as Project Consolidate, the Joint Initiative on Priority Skills Acquisition (JIPSA) and the Siyenza Manje Programme has helped improve skills needed by municipalities to provide services. Substantial improvements have been noted in the provision of basic services. For example, access to potable water services has improved remarkably from a national average of about 70% in 1996 to about 90% in 2019 (Statistics South Africa 2019). Importantly, there is access to free basic water services through subsidising schemes. Equally, there has been a significant improvement in access to electricity from a national average of 62% in 1996 to 85% in 2019 (Statistics South Africa 2019).

Despite the notable service delivery achievements, South African municipalities are still bedevilled with several challenges. These challenges exist on both the supply and demand sides of public services. The supply side challenges are those emanating from the ability of the municipalities to fulfil their roles, while the demand side challenges are those arising from the communities served by the municipalities. The common supply side challenges include the lack of adequate skills and capacity to provide services, unavailability of adequate funds to finance projects, poor maintenance of infrastructure, corruption and political factors (Cogta 2016 annual review). On the other hand, challenges that exist from the demand side include population growth, social unrests, and the illegal use of services such as water and electricity, and lack of proper cooperation from citizens (Hommes et al. 2019; Massey 2014; Rietveld et al. 2009). All these challenges further burden the capacities of municipalities, which are already faced with massive backlogs that emanated from the segregation laws of the apartheid dispensation.

### ***2.3.2 Project management in municipal service delivery***

Using techniques, methods, skills, knowledge, and experience to achieve particular goals in accordance with the project acceptance criteria while staying within predetermined bounds is known as project management (Knipe et al. 2002). It has final deliverables that are constrained to a finite timescale and budget. A project is temporary in that it has a defined beginning and end time, and therefore, defined scope and resources. Project management processes fall into six groups, namely, initiating, planning, executing, monitoring, controlling, and closing (Laurea and Hyttinen 2017). The project identification and design stage, as described in the practical guide for municipalities, is equivalent to what the starting and planning of groups do. This is where the project's ideology is formulated. Although the other stages have different names, they have some similarities. For example, the controlling and closing groups can be equated to the project evaluation phase (Abrahamse 2004). The ten areas of project management knowledge are integration, scope, time, cost, quality, procurement, personnel management, information, risk management, and stakeholder management (Laurea and Hyttinen 2017). These ten areas resonate with the ideas of Stojcetovic (2014), who put forward the iron triangle, which identifies quality, cost, and time as the criteria for measuring project success.

Project implementation is related to service delivery. Hence, there is a connection between project management and service delivery; thus, service delivery is the implementation stage of project planning (Fourie and Valeta 2008). According to Wang et al. (2019), critical project factors like customer orientation are considered during the project implementation phase. Proper project management has many benefits for organisations, both public and private (Koops et al. 2017). Project management processes and techniques allow projects to be completed on time and within the stipulated budget. In addition, project management offers a process, framework, techniques and guidelines that improve the chances of project success.

In the context of this study, the significance of project management revolves round the idea that municipal departments can create standardised practices and techniques to work with all outcome-driven initiatives and outputs. Project and program management ensures that public service managers are held accountable for how resources are allocated and used to further the public service's objectives (Koops et al. 2017; Wang

et al. 2019). The capacity of the public sector, is essential to the expansion of the economy. In order to manage the significant responsibility of overseeing numerous projects, public sector organisations now require a core level of project management expertise. The efficient use of resources has a substantial impact on the welfare of citizens and is one of a wide range of potential applications for resources in the public sector. A decision to execute one plan may prevent the implementation of others because resources are limited. Even when given the option to choose between "doing something" and "doing nothing or the bare minimum," there are always other options that need to be compared. In considering a spending proposal, decision makers need to be assured that the overall welfare of society is raised because of the proposed action. Thus, project management practices help in this regard (Davis 2017).

Wang et al. (2019) suggest that the application of project management practices varies widely among organisations, and within the various divisions of the same organisation. Generally, projects are managed by applying varying degrees of project management knowledge, processes, tools, and templates. Organisations without standardised project management policies often manage projects informally. For example, projects may be managed informally by applying some elements of project management processes without comprehensive documentation, formal review, change control, or approval. Gantt charts, logic networks, project evaluation and review technique (PERT) charts, product breakdown structures, and work breakdown structures (WBS) are some of the main standard tools used in project planning (Martens et al. 2018). These numerous tools help to track tasks across time, indicate the sequence of activities over time, analyse the tasks involved, and provide a hierarchical decomposition of the deliverables (Martens et al. 2018).

Municipalities experience several challenges with respect to project management. The most common challenges include a lack of political leadership, political interference, patronage, a demanding policy agenda, complex reporting demands, and the weakening of institutional abilities (Koma and Modumo 2016). Corruption is another major challenge, leading to people's declining trust in municipalities. Further, a lack of adequate funds, skills, capacity, strategic leadership, and ineptness continue to deter project management (Koma and Modumo 2016). South African municipalities are also often criticised for resisting change related to the implementation of new project

management processes. Many municipalities have been managing their projects by applying certain procedures and are comfortable with those traditional approaches (Khan and Morshed 2012).

According to Kosarkiewics (2016), establishing superior interpersonal practices can help projects run smoothly. Most disputes that occur throughout a project are typically the result of miscommunication rather than a specific issue. A project management plan places a strong emphasis on creating a network of stakeholders and role-players, which reduces misunderstandings. Many initiatives encounter difficulties due to the mismatch between what recipients or clients anticipate and what the project team can actually deliver. Better project planning can be achieved by employing a methodical approach, which allows the team the chance to confirm that they concur on the project's main milestones (Fringsdorf 2014). Enhanced financial certainty and control can be achieved by improved cost estimation, formal budgeting, and better tracking of actual expenses. However, "poor initiatives" include those in which the economic feasibility is no longer valid. In most circumstances, a project may no longer be sustainable if it is delayed and exceeds the initial budget.

The project management methodology enables a proactive approach to predict problematic situations earlier, enabling decisions about rescoping or abandonment. It offers direction that makes it simpler to gather measurements (Fourie and Valeta 2008). As a result, the metrics offer the data required to confirm if the project was successful or not. The methods and clinical protocols can then be used for other projects of a similar nature. As a result, as processes and templates do not need to be created from scratch on each project, there is a shorter learning curve for project team members and a faster project start-up time. Some teams waste too much time and effort trying to fix issues because they have no idea how to do it in the first place. Proactively managing difficulties makes it easier to guarantee that issues are rapidly fixed timeously (Fringsdorf 2014; Kosarkiewics 2016).

Having better project management processes will result in departments being able to manage the scope of a project more effectively, thus saving costs and other resources (Fourie and Valeta 2008). Risk identification and management procedures are part of good project management. Potential issues will be recognised and controlled through the use of effective risk management procedures. Tasks with significant difficulty

frequently result in demoralisation among team members resulting in lower production. A successful technique will enhance the project team's feeling of empowerment, increase their motivation, and improve their professional image and self-assurance (Van der Waldt 2019). According to Ravesh (2017), high-quality processes and procedures for planning and managing capital investment have been found to be important in other emerging countries like Chile, South Korea, and Malaysia. The objective of such processes and procedures is generally to maximise the absorption of funds where planning covers a much longer period and is geared toward the types of investments that target community priorities. As such, project management is used as a tool to increase the probability of on-time and within-budget delivery.

## **2.4 Some key legislations governing South African municipalities**

South African municipalities have a legal mandate to provide public services to the communities they serve. This mandate is derived from the South African Constitution (1996), which is the supreme law of the country. Various other legislations exist to guide municipalities in providing services and managing projects that relate to public service delivery (South African government 2019). These legislations include the Municipal Systems Act 32 of 2000, the Municipal Structures Act 117 of 1998, the Municipal Finance Management Act 56 of 2003, the Promotion of Access to Information Act 2 of 2000, and the Municipal Planning and Performance Management Regulations of 2001 (Treasury 2015). These legislations complement each other in guiding municipalities in their mandate to provide public services.

The Municipal Systems Act 32 of 2000 was developed as a replacement for the system of local government under apartheid, which had failed dismally to meet the basic needs of the majority of South Africans (Faolex 2000)<sup>3</sup>. After attaining democracy in 1994, South Africa needed a new system of local government that placed efficiency, effectiveness, equity and transparency at the centre of municipal administration that conformed to constitutional principles. The Municipal Systems Act outlines municipalities' obligations and rights. These obligations include ensuring that local residents have equal access to the public utilities to which they are accustomed as

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<sup>3</sup> <https://faolex.fao.org/docs/pdf/saf93030.pdf>

well as promoting and undertaking development in the municipality. The Act also obligates local authorities to set up a performance management system that guarantees the economical, effective, and transparent management of their operations (South African government 2019). This mandate with numerous other mandates enshrined in the Municipal Systems Act, serves to ensure that there is proper project management and service delivery to the general populace.

Another piece of legislation which governs how South African municipalities operate is the Municipal Structures Act 117 of 1998. Developed to ensure good governance, the Act spells out the composition, membership, operation, and dissolution of municipal councils. (Government gazette 2019). The Act gives details about the municipal executive council and its duties, which include overseeing sustainability in the provision of public services to communities within the municipality. Although this Act chiefly focuses on manning the municipalities, at the heart of it all is service delivery to the people. This is because the Act identifies, inter alia, the provision of potable water services, the provision of electricity services, and firefighting as functions of the municipalities. Most importantly, the Act classifies South African municipalities into categories A, B and C (StatsSA 2016). Category A refers to metropolitan municipalities, which are highly urbanised, developed, and populated municipalities. Currently, there are only eight (8) metropolitan municipalities in South Africa, and the eThekweni Municipality, which is a case of this study, is a metropolitan municipality (Government gazette 2019). On the other hand, category C municipalities are districts that have very large municipalities that are further divided into various local (category B) municipalities. Local municipalities are further grouped into different classes, these are B1, B2, B3 and B4 municipalities<sup>4</sup>. Overall, South Africa has 44 district municipalities and 226 local municipalities, thus a total of 278 municipalities (Department of Cooperative Governance or DCoG)

The Promotion of Access to Information Act 2 of 2000 is another important piece of legislation also developed to correct the systems of governance that existed during the apartheid era. The pre-democracy era systems of governance were characterised

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<sup>4</sup> B1 refers to any local municipality with a large town or city as its urban core. B2 refers to any local municipality with a medium town as its urban core. B3 refers to any local municipality with a small town as its urban core. B4 refers to any local municipality without an urban core.

by a secretive and unresponsive culture in public and private bodies, which often led to an abuse of power and the violation of human rights. The Promotion of Access to Information Act gives effect to section 32(1) (a) of the Constitution which provides that every South African citizen has the right of access to any information held by the State. More specifically, the object of this Act is to foster a culture of transparency and accountability in public and private bodies and actively promote a society where people have effective access to information. The ability to effectively obtain knowledge empowers individuals to properly exercise and defend their rights. According to the Act, citizens can apply for and receive public records from office bearers regardless of when the record came into existence, upon payment of the request and access fees specified in the Act.

Apart from key legislations, the government also enacted policies and regulations to promote good management and service delivery. Notable among them is the Municipal Planning and Performance Management Regulations (2001). This regulation warrants the enactment of an audit committee that is responsible for overseeing the internal auditing of performance measurements for each municipality. It stipulates that a municipality must provide the community at least 21 days to comment on the integrated development plan's final draft before submitting it to the council for consideration. This dictate resonates with the Promotion of Access to Information Act 2 of 2000. As such, these regulations draw a bit from the various acts and narrow them down to explain how municipalities should operate.

## **2.5 Project management and service delivery in the eThekweni Municipality**

The eThekweni Metropolitan Municipality is on the east coast of South Africa, in the Province of KwaZulu-Natal (KZN). The Central Municipal Planning Region, South Municipal Planning Region, West Municipal Planning Region, and North Municipal Planning Region are its four functional areas. The Umgeni River, the Umlazi River, and the Kloof Ridge serve as these areas' catchment-based functional borders (eThekweni Municipality 2019). The municipality provides various services to residents within its area, regardless of the diverse spatial distribution. Key services, among many others, provided by the municipality include water and sanitation, electricity,

solid waste collection and management, transport and communication, social facilities and infrastructure development (eThekweni Integrated Development Plan 2019).

The municipality has made some significant strides in the provision of public services to its residents. In 2019, about 98% of residents had access to potable water services, with more than half of that percentage being able to access piped water inside the house, while the rest access it either in the yard, or from public taps located within reasonable distances from their places of dwelling (Statistics South Africa 2019). Further, approximately 83% of the residents in the municipality had access to proper sanitation (Statistics South Africa 2019). These statistics show great improvement from those reported in 2001 national census where approximately 80% had access to portable water services and 70% had access to proper sanitation (Statistics South Africa 2011). In terms of other municipal services, statistics show that about 97% of residents had access to electricity (Statistics South Africa 2019). The last national census reported that approximately 76% had access to electricity services (Statistics South Africa 2011). On the other hand, about 92% of residents, up from 88% in 2011, received refuse collection services directly from the municipality or from a contracted private company. These statistics have shown the dramatic advancement made by the municipality in service delivery between 2001 and 2011.

The municipality has in place a package of plans and systems which build on the statutory planning processes required by law. The package is divided into four levels: the spatial development framework (SDF), spatial development plan (SDP), local area plans (LAPs), and land-use management system (LUMS)/precinct plans. The Durban City Centre, the Durban South Basin, the Port of Durban, and the regions of Pinetown and New Germany see the majority of economic activity. (South African Local Government Association, SALGA 2019). Benefits of growth are not evenly distributed, with the majority of employment and consumption prospects being clustered in the core districts. The municipality launched a number of measures to address this, including black township redevelopment programmes, upgrading bulk and reticulation basic network services, and offering business support services to the informal sector and small and medium-sized businesses (SMEs) in particular (eThekweni Municipality 2019).

In comparison to other large metropolitan municipalities, the eThekweni Municipality has a significant advantage in its transport and communications segment, which is larger (compared to the size of the city's economy) (Dray et al. 2007). While its industrial sector is also growing rapidly, its development in the transportation and communications sector has exceeded that of other cities and is significantly larger than the national and global averages (Morgenson 2013). The Integrated Public Transport Network (IPTN) consists of a North-South rail backbone from Bridge City to Isipingo and several Bus Rapid Transport (BRT) routes. The National Department of Transport has set out a process to assist in translating the public transport vision articulated in the National Public Transport Strategy 2007 (eThekweni Municipality 2020). The municipality worked on a plan for a massive housing project to build low-, middle- and upper-income houses in the north of Durban. This will be combined with an industrial and commercial project, giving residents job opportunities within their own neighbourhood (South African Local Government Association, SALGA 2019).

While the eThekweni Municipality is among the best performing municipalities in South Africa in terms of project management and service delivery, it can also draw some inspiration from other municipalities both within the country and across the world. In South Africa, while the City of Johannesburg benefits from its advantages in banking, technology, networking, and recreation, the City of Cape Town uses modern methods in the retail, travel, entertainment, and media sectors. (South African Local Government Association, SALGA 2019). For example, the City of Cape Town Metropolitan Municipality spends approximately R8.4 billion annually in maintaining and building new infrastructure, thus making it one of the most vibrant and progressive cities, which helped it to become a member of United Nations Educational, Scientific and Cultural Organisation's (UNESCO) creative cities network as a design city in 2017 (Invest Cape Town 2021). The municipality achieved this through global partnerships, strategic planning, proper project management and creative thinking in its infrastructural development and civil engineering projects (SALGA 2019). Differently, Nairobi is also a rising powerhouse in Africa. Privatisation, commercialisation, and corporatisation of services are injecting sound, proven, private-sector techniques into public-sector activities (Brown, Parker and Ryan 2000). Nairobi's project 'water for all' has made potable water services accessible to most of its citizens, while other notable projects include a tuberculosis (TB) clinic, a fire station, and a stadium (Koops et al.

2017). In the United Kingdom and Ireland, a more citizen-oriented culture has been adopted in public administration and is delivering quality public services that are consistent with citizen preferences while handling fiscal resources prudently (Tavares et al. 2016).

Although some significant progress is noted in the eThekweni Municipality, the municipality continues to struggle with having a trained and viable labour force, which reduces productivity and hinders the path of economic progress. Due to this, the informal sector grew by 5% between 2008 and 2018, showing a declining formal economy (SALGA 2019). There are more communities living in extreme poverty as a result of both the high household dependency ratios and the high unemployment rates. Current welfare programmes and processes are unsustainable, therefore, the municipality must devote more funds to help its residents (SALGA 2019). Further, the municipality is challenged with increasing rural-urban migration (eThekweni Municipality 2019). This is increasing the number of informal settlements, overcrowding in schools, health issues, spatial disparities, higher cost of providing infrastructure and services, disturbed ecosystems, biodiversity and environmental resources, changes in air quality, changes in aesthetics and urban form, among others (eThekweni Municipality 2020).

Further, the eThekweni Municipality also continues to experience backlogs in service delivery. Although housing delivery ranges between 4 000 and 6 000 houses per annum, the current backlog for the provision of housing was over 380 000 houses in 2019 (eThekweni Municipality 2019). In terms of sanitation, there is a backlog of about 123 394 household units, with the delivery of sanitation ranging from 8 000 units to 10 000 units per annum. (EThekweni Municipality 2019). On the other hand, there is a backlog of about 220 432 household units in terms of the provision of electricity, with the municipality offering electricity to between 8 000 and 14 000 new household units per annum. In terms of water services, there is a backlog of about 20 345 household units with a delivery range of between 2 000 and 4 000 per annum, while roads have a backlog of about 1 046 km with a delivery range of between 10 and 15 km per annum. (eThekweni Municipality 2019). With the current resources and the plan in place the backlogs, will take many years to be rectified. More precisely, housing would need 45 to 80 years, sanitation would require 12 to 15 years, electricity 16 to 28 years, water 5

to 10 years and roads would require 70 to 105 years to clear all backlogs (eThekweni Municipality 2020).

## **2.6 Summary**

This chapter discussed the existing literature on project management and municipal service delivery. The chapter identified and reviewed key theories on project management. As a foundation, this study was underpinned by the theory of project and the theory of management. A discussion of how these theories link to project management and municipal service delivery was presented. Subsequently, the chapter provided a comprehensive discussion of some empirical literature on the two phenomena. The reviewed literature revealed project management as a tool at the disposal of municipalities to deliver better and improved public services. Further, the chapter discussed some of the laws that govern South African municipalities. Finally, key service delivery and project management issues within the eThekweni Metropolitan Municipality were discussed. The next chapter discusses the methodology used to examine the link between project management and municipal service.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

The aim of this study is to explore the link between project management and service delivery in the eThekweni Metropolitan Municipality. To achieve this aim, the study addresses three main research questions about challenges in project management. These questions concern how project management issues affect service delivery, and potential solutions to the municipality's project management and service problems. This chapter presents the methodology used to achieve the outlined aim and specific objectives. The chapter discusses the research design, study site, population, sample, sampling techniques, research instruments, data collection procedures, data analysis, and ethical considerations.

#### **3.2 Research design**

According to Zikmund et al. (2013), a research design is a master plan or research roadmap that details the procedures and methods to be followed systematically to achieve the objectives of the research. It is, in essence, the underlying strategy of purported research aimed at obtaining answers to a common research problem. The three major approaches to research in the social sciences are qualitative, quantitative, and mixed methods. Qualitative research is a scientific method that gathers non-numerical data, while quantitative research deals with numbers and anything that is systematically measurable when investigating phenomena (Berg and Lune 2012; Creswell 2021). The former refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of phenomena (Berg and Lune 2012). On the other hand, quantitative research is used to address questions arising from relationships that exist between quantifiable variables with the intention of

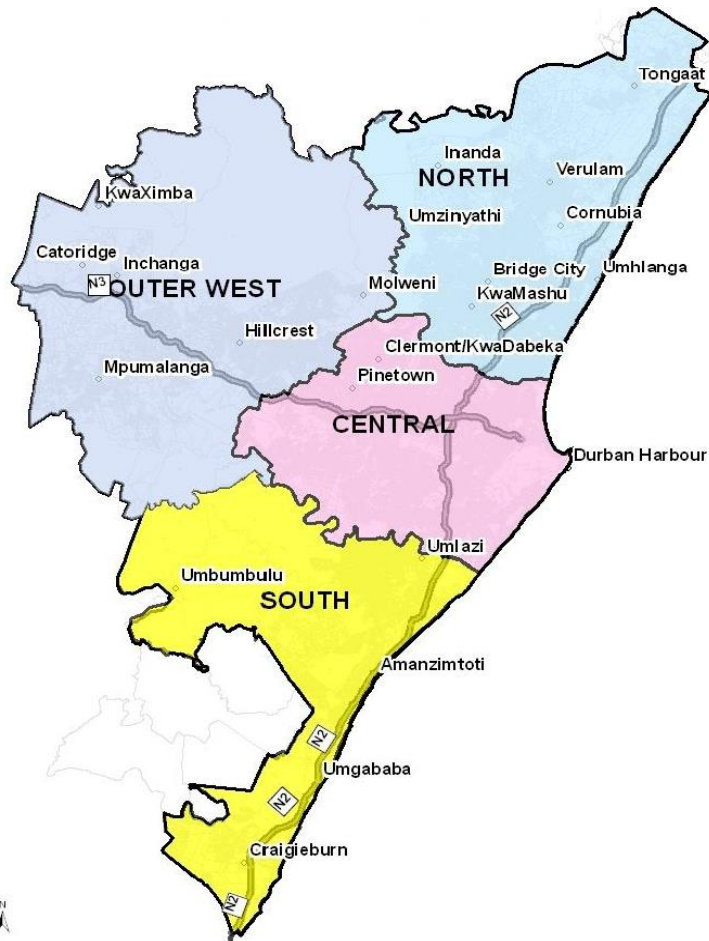
predicting, explaining, and controlling phenomena (Creswell 2011). While a qualitative or quantitative approach may be adopted based on the aim and context of the study, a mixed method approach may be adopted to take advantage of the strengths of both qualitative and quantitative approaches.

Although the three research approaches mentioned above possess distinct merits, this study adopted the qualitative approach to examine the link between project management and service delivery in the eThekweni Metropolitan Municipality. This approach was adopted because of its more malleable structure, which allows its design to be built and reconstructed more easily (Maxwell 2012). Thus, by using qualitative research techniques, comprehensive and suitable assessments of a problem may be generated since participants have ample flexibility to decide what is consistent for them (Flick 2011). Resultantly, the approach makes complicated research problems researchable and easy to understand. The link between project management and service delivery is somewhat blurred in the context of South African municipalities; hence, a qualitative research approach can be a useful tool to draw more robust information on the phenomenon.

Qualitative data collection techniques are exploratory in nature and are often more concerned with obtaining insights and comprehending the research problem through in-depth examination (Maxwell 2012). They are mainly unstructured due to their lack of quantifiability. A variety of qualitative data collection techniques exist and include structured or semi-structured in-depth interviews, focus group discussions, and participatory research (Lawrence and Tar 2013). While each of these techniques has its own merits, semi-structured in-depth interviews were deemed more appropriate for this study given its outlined aim and objectives. Therefore, the study adopts the semi-structured in-depth technique to collect data on the link between project management and service delivery. Generally, the semi-structured interview is an excellent technique for collecting qualitative data, especially when researchers need highly customised information from participants (Adams 2015). They allow the researcher to dig deeper and elicit more information through follow-up questions. This is because the interaction between the researcher and participants is not too restrictive (Adams 2015).

### **3.3 Study site and population**

The study was conducted in the eThekweni Metropolitan Municipality. This municipality is located on the east coast of South Africa in the KwaZulu-Natal province. It is the only metropolitan in the province and ranked the third largest metropolitan in South Africa by population (StatsSA, 2022). The municipality's population is 3.9 million, predominantly Black (74%), followed by Indians (17%), then Whites (7%) and Coloureds (2%) (StatsSA, 2021). The municipality is the economic capital of the province, contributing 60% of its gross domestic product (GDP) (Department of Cooperative Governance and Traditional Affairs or COGTA 2020). Service delivery sectors in the municipality are classified into eight administrative units each with distinct and well-defined duties and responsibilities (eThekweni Municipality 2021). Each administrative cluster is accountable for its own planning and budgeting in line with the general plan of the municipality. The map of the eThekweni Municipality is given in Figure 3.1.



**Figure 3. 1 Map showing the spatial regions of eThekweni Municipality**

Source: eThekweni Municipality (2014)

The map shows that the municipality is divided into four spatial municipal planning regions, namely, the North, Central, South, and Outer West. The Northern region covers about 26% of the municipal area, while the Outer West region covers about 34% of the municipal area (COGTA 2020). On the other hand, the Central region covers about 28% of the municipal area, and the Southern region covers about 20% of the municipal area. Four municipal units are of major interest to this study. These units are the human settlements, water and sanitation, electricity, and transport. The basic services offered by municipalities include, water and sanitation, electricity, housing, and transport especially to the disadvantaged and marginalised sector of the population (eThekweni, 2020). The four units of interest are directly involved in delivering essential municipal services to the residents in the municipality as identified by COGTA (2020). The four units are directly involved in the implementation of the

municipality's Spatial Development Plan which aims to improve service delivery through undertaking specified projects (eThekweni Municipality 2021). The staff complement for these units are water and sanitation (3711 employees), electricity and transport (3891 employees), and human settlements (478 employees) (eThekweni Municipality 2020).

### **3.4 Study sample and sampling technique**

A sample refers to a component of the group from which conclusions about the entire population can be drawn (Sim et al. 2018). It serves as a representative of the group from which data and details regarding a study issue are gathered (Creswell 2021). Fusch and Ness (2015) claim that sample size appropriateness in qualitative investigations is mostly determined by the quality of the data and sample composition. The sample size should be sufficient to adequately characterise the observed phenomena and to answer the research topic (Sim et al. 2018). Thus, the sample composition should be a true representative of the population, which enables the researcher to collect in-depth information about the study phenomenon (Sim et al. 2018). A small sample size decreases the explanatory power of the research transferability, and raises the margin of error, which may negatively impact trustworthiness. Therefore, sample size adequacy is a critical factor in determining the quality and credibility of a study (Fusch and Ness 2015). A small sample size also influences the dependability of survey findings and increases variability, leading to bias. In qualitative research, the concept of saturation can be used to determine a sufficient sample size (Fugard and Potts 2014). The concept of saturation entails that sampling should continue until no new information is gained. Therefore, the concept of saturation is used to determine a sufficient sample size for this study.

Although sampling will continue until saturation is reached, this study intends to collect data from 30 participants. The targeted participants will be drawn from the four municipal units identified earlier, namely, water and sanitation; human settlements, transport, and electricity. Participants will be senior employees aged between 18 and 60, employed either on a fixed-term contract or permanently, and in various designations. Further, the selected participants will be those that are involved either in

projects or service delivery, or both. Therefore, casual employees, as well as employees from other units, and those who do not fall within the specified inclusion criteria will be excluded from the sample. The targeted participants are believed to have thorough and diverse knowledge regarding issues of project management and service delivery in the municipality. This is because they were selected on the basis that they are involved in one of these two matters, or both in one way or the other. Therefore, the information collected from these participants is deemed reliable and robust.

Sampling is the process of choosing elements or units from the population that generate data for the study (Creswell 2014). Sampling arises because it is not feasible to collect data from all elements or units of the population. The inferential hypothesis allows researchers to evaluate a population's features by explicitly observing just a part of the population, thus enabling inferences to be made about populations (Battaglia 2011). There are two broad sampling methods, namely, probability and non-probability sampling. The former entails that every segment of the group under study has the same chance of inclusion in the sample (Walliman 2010). Inferring that all units are potential study participants, any unit within the population has a predetermined and non-zero probability of being included in the sample (Rossman and Rallis 2016). On the other hand, non-probability sampling entails that each unit of the population has different chances of being included as a participant in the study (Taherdoost 2016). This study identified respondents using a non-probability sampling technique. Common types of non-probability sampling are snowball, purposive, quota, and convenience non-probability sampling (Rossman and Rallis 2016). Each of these types of non-probability sampling has its own advantages and can be applied to each study based on the objectives of the study and the dynamics of participants. For the purposes of this study, the purposive non-probability sampling techniques was deemed more appropriate and used to select participants for the study. The purposive sampling is praised in the literature for producing well-matched groups (Pandey and Pandey 2015). More importantly, it is flexible and allows the judgement or intuition of the researcher when selecting participants for the study (Babbie 2011). Thus, it was used to select participants in this study.

### **3.5 Data collection instrument**

The purpose of data gathering is to generate high-quality information that can be synthesised into insightful knowledge and provide credible interpretations of the research issues (Hollis et al. 2018). Effective data collection is fundamental for the validity and reliability of a study, irrespective of the subject matter or the approach used to characterise data (such as qualitative or quantitative) (Hollis et al. 2018). The tool used to gather data for an empirical study is referred to as a data collection instrument. In this study, a semi-structured interview schedule was prepared to collect data from the selected participants. The interview schedule guides discussions during the data collection process. This instrument was preferred because it guides the participants while allowing them enough space to explain and clarify points.

The interview schedule was compiled in English since the targeted participants are all expected to be conversant in the language. However, some participants responded in isiZulu but the collected data was translated to English during analysis. The interview consists of twelve (12) questions where each question has some probes as follow-up question for further clarity and expansion of points. In formulating the interview questions, the literature was extensively reviewed in the context of the aim and objectives of the study. Thus, questions deemed appropriate to adequately address the aim and objectives of the study were formulated after a thorough review of both theoretical and empirical literature.

Further, eight (8) peers were used to review the questions contained in the interview schedule. This was done to enhance the validity and reliability of the interview timetable in collecting data that address the objectives of the study. The validity and reliability of an interview schedule are important elements of scientific data collection. The former refers to how precisely a study reflects a concept, whereas the second refers to how consistently an instrument yields the same results when applied regularly to the same context (Oluwatayo 2012). The two exercises guarantee that the data collected is sound, reproducible with correct conclusions and reliable inferences (Oluwatayo 2012). Feedback from the peer review exercise was used to improve the interview schedule. Thus, questions that were difficult to understand as well as words that could have been misinterpreted were revised and presented in a more

straightforward manner. Therefore, the interview questions became simpler and easier to understand following the peer review exercise<sup>5</sup>.

### **3.6 Data collection procedure**

Data collection is the act of gathering data on the mentioned factors inside a predefined framework, which allows one to address the research problem and assess the results (Wilson and Fox 2013). As noted in the previous subsection, semi-structured in-depth interviews were used to collect data in this study. According to Roulston (2016), interviews may be conducted haphazardly or sequentially (i.e., guided). Haphazard interviews exist when data is collected without following a given guide, while sequential interviews follow a given guide (Roulston 2016). Engle and Schutt (2014) suggest that most interviews are conducted using a sequential one-on-one mode. In sequential one-on-one interviews, the researcher contacts participants one at a time and administers the interview in a sequence (Creswell et al. 2003). Such an approach may be conducted using various modes like face-to-face and telephonic interviews, emails, or virtual platforms like MS Teams, Zoom and Skype. The study adopted a sequential one-on-one mode to conduct semi-structured interviews.

Prior to data collection, permission to collect data was sought from the municipality<sup>6</sup>. Subsequently, the potential participants were approached telephonically and consent forms were emailed to those who agreed to participate<sup>7</sup>. Further, participants were also advised that participating in the research study was entirely optional and that they could opt out of the interview at any stage if they so choose. Additionally, prior to the interview, all participants were informed that the interview would be recorded.

After informed consent was obtained, the interviews were conducted using virtual platforms. These platforms have been extensively used recently due to the COVID-19

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<sup>5</sup> The interview schedule that was used to collect data is given in Appendix 1

<sup>6</sup> The gatekeeper's permission is given in Appendix 2.

<sup>7</sup> A copy of the informed consent template presented to participants is given in Appendix 3.

pandemic, which rendered face-to-face interviews risky (Jowett 2020). Thus, platforms like Microsoft (MS) Teams and Zoom have become convenient, reliable, and safe spaces to conduct interviews. These platforms also have functions to record interview sessions, thus they do not only save on transport costs to meet participants but also saves on money that may have been used to buy recording devices. Therefore, these two virtual platforms were used to collect data, which was stored as audio files in this study. However, there is a chance that some participants may prefer face-to-face interviews. Such interviews will be conducted in strict observation of COVID-19 protocols. These interviews were conducted in properly ventilated venues, with face masks worn correctly throughout the sessions, both researcher and participant sanitised their hands regularly and a safe distance of at least two metres apart was maintained throughout each session. These sessions were recorded using a voice recorder, with a notepad used to capture key points. They were all conducted in English. However, participants had the liberty to express themselves in isiZulu. Each session was expected to have a duration of 30 minutes at the most.

### **3.7 Data analysis**

Data analysis is the process of transforming raw data into usable information that clarifies an idea, phenomenon, or subject under investigation (Braun and Clarke 2014). According to Serry and Liamputtong (2013), qualitative data analysis is a process that requires the exploration, organisation, interpretation, and integration of research material. In qualitative research, data analysis entails the processes and procedures of transforming the collected qualitative data into an explanation or interpretation that people can easily understand (Jamieson 2016). Qualitative data analysis is usually based on an interpretative philosophy whose idea is to examine the meaning and symbolic content of data (Jamieson 2016). The most common qualitative data analysis techniques include narrative analysis, content analysis, interpretive phenomenological analysis, grounded theory, discourse analysis, and thematic analysis.

In this study, the thematic data analysis approach was adopted. This approach analyses qualitative data by identifying patterns, trends, and themes that arise from

the data (Braun and Clarke 2014). It is a procedure that categorises verbal or behavioural data for the purpose of classification, summarisation and tabulation (Jamieson 2016). The main purpose of thematic analysis is to uncover patterns and themes that may help researchers answer research questions and achieve study objectives (Clarke and Braun 2013). The approach is preferred in this study for many reasons. It is adaptable and flexible since it can be used in a variety of study designs (Javadi and Zarea 2016). Further, it enables researchers to comprehend the elements of a phenomenon that participants discuss often or in detail, as well as the connections between those parts of a phenomenon (Javadi and Zarea 2016). Additionally, it helps identify the connection between phenomena, thus it was deemed appropriate to examine the link between project management and service delivery in the context of this study. After the raw data was cleaned it was manually uploaded into the Microsoft Excel software for analysis. Details of the steps followed to analyse data in this study are given in Table 3.1.

**Table 3. 1: Data analysis procedure used in the study**

Step	Description
1. Familiarisation	This involves listening to audio recordings and reading interview notes. Identified and highlighting Key themes and ideas.
2. Coding	A list of codes is developed, and the data is organised into different categories. The objectives of the study are considered during data coding.
3. Indexing	Codes are developed into thematic indices and applied in a systematic manner to data. The researcher’s judgement is applied to decide the most appropriate codes.
4. Charting	Data is re-arranged into a sequence of charts that combine data with similar codes in one place from all the data sources. Charts are developed by utilising the framework of the thematic index which creates logic and sense to objectives of the study.
5. Mapping and interpretation	Each chart is studied and a clear interpretation of the data is given. The researcher will determine the nature of the phenomenon of interest. Focus is also given to views that deviates from the main findings, as they may be an important source of information that could lead to further understanding of the phenomenon.

### **3.9 Ethical considerations**

Ethical considerations relate to the process of doing research while taking into account the ideals and principles that govern the study's morality (Fleming and Zegwaard 2018). They are the guiding principles that govern how a researcher conducts himself (Gibson et al. 2014). When conducting research, ethical concerns are as important as selecting appropriate study methods and tools (Fleming and Zegwaard 2018). Ethical concerns influence the authenticity of a study and should be overemphasised. Common ethical behaviours in qualitative research include informed consent, anonymity, confidentiality, reflexivity, and the various forms of trustworthiness. These ethical issues are discussed in this section<sup>8</sup>.

#### ***3.8.1 Informed consent***

Participants to a study should be fully informed of their participation and freely agree to participate (Babbie 2011). They should decide whether to take part in a study given the information provided about the study (Walliman 2010). By ensuring that participants are treated fairly, helpfully and respectfully, informed consent safeguards the participants' rights as independent individuals. Neglecting its importance could lead to unethical behaviour and participant rights violations (Gibson et al. 2014). Participants were adequately briefed about the research before beginning the interviews, and they are asked to fill out a written consent form.

#### ***3.8.2 Confidentiality and anonymity***

Confidentiality entails extricating or amending any personal and identifying information provided by participants, with the intention of protecting their information from any third party. It involves removing or altering any personal and identifiable information supplied by participants from the data (Ethicist 2015). On the other hand, anonymity entails the preservation of the participants' identities during any stage of the study. Anonymity and confidentiality are critical in safeguarding the identity of individuals who

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<sup>8</sup> The study received ethical clearance from the University, and this is presented in Appendix 4.

choose to participate in a study (Ethicist 2015). In this study, participants' personal information such as names and identifying data were strictly kept secret. Where participants needed to identify themselves, they did so using pseudonyms. All identifiers were removed from the collected data to promote confidentiality. Furthermore, the original data was kept on a password-protected computer that was accessible only by the researcher. This data will be kept for a period of five (5) years and deleted afterwards.

### ***3.8.3 Reflexivity***

This refers to the evaluation of one's own views, judgements, and behaviour during the research process, as well as the extent to which they may have affected the study (Darawsheh 2014). Reflexivity entails the researcher challenging her own unquestioned preconceptions (Dodgson 2019). The purpose of being reflective is to ascertain any personal views that may influence the study inadvertently (Darawsheh 2014). Reflexivity was maintained by taking notes of the participants' remarks and the researcher's ideas throughout the interview; memorising as quickly as possible after the interview; creating and constantly revising the researcher's subjective statements.

### ***3.8.4 Trustworthiness***

The degree of confidence in the data, their interpretation, and the techniques used to ensure the study's quality is referred to as trustworthiness (Lincoln and Guba 1985). In a qualitative investigation, credibility serves to back up the claim that the findings are significant (Lincoln and Guba 1985). Qualitative researchers must expose the analytical procedures in sufficient detail for the reader to assess the process' credibility by documenting, consolidating, and documenting that data analysis was carried out exactly, consistently, and thoroughly (Phillips et al. 2019). In qualitative research, there are various ways to gauge credibility, including disclosure, auditability, interviewer corroboration, peer debriefing, extended engagement, adverse case analysis, and member check, confirmability, bracketing, and balancing (Phillips et al. 2019). Using peer debriefing, which included the supervisor as an expert and peer reviewer, the

study's credibility was addressed. Moreover, extensive probing was used to gather data. To produce an audit trail that enables other researchers to carry out analogous experiments and obtain equivalent results, the study processes were documented.

### **3.9 Delimitation of the study**

Delimitations are the features that constrain the scope of the research and define its limits, such as the sample size, the geographical area or environment in which the study is conducted, and demographic characteristics (Simon and Goes 2013). Delimitations refer to the study's limits, which are determined by the researcher's choice of what to include and what to omit (Theofanidis and Fountouki 2018). The researcher did not visit all the places in the eThekweni Municipality to find out if certain problems raised to affect other places. Furthermore, problems could be generalised for low market and upmarket areas. Problems to deal with water and sanitation as well as electricity problems mainly affected high density residential areas and less of compared to upmarket areas. Delimitation is utilised to improve and facilitate research as it narrows down the scope of the research into a researchable one (Theofanidis and Fountouki 2018). The study results were interpreted based on the data collected from eThekweni Municipality and may not be transferable to other municipalities. The eThekweni municipality was researchable. The eThekweni Municipality was a researchable area based on its location and language. The researcher works within the municipality and speaks the native language hence no language barriers and easy to access participants within the municipality. The province experience backlogs in service delivery, provision of housing, sanitation, water services, and roads (eThekweni Municipality 2019). These backlogs can be cleared in 70 to 105 years to clear all backlogs (eThekweni Municipality 2020). Therefore, the study was based on the nexus between project management and service delivery in the eThekweni Municipality. The municipality provides various services to residents within its area, regardless of the diverse spatial distribution. Key services, among many others, provided by the municipality include water and sanitation, electricity, solid waste collection and management, transport and communication, social facilities and infrastructure development (eThekweni Integrated Development Plan 2019). Therefore, the research topic would be aligned with good project administration to achieve municipal service

delivery goals in collaboration with institutional growth, governance, and conformance. The Municipality was relevant to meet study objectives by examining the project management challenges experienced and to examine the impact of the identified project management challenges on service delivery in the eThekweni Municipality.

### **3.10 Conclusions**

The chapter contained the research approach, data collection methods and data analysis techniques. The approach was qualitative in nature and based on the eThekweni Metropolitan Municipality. The non-probability purposive sampling technique was used to select the participants. Data saturation was used and the study targeted a sample of about 30 senior employees in four units of the municipality, namely, human settlements, water and sanitation, transport and electricity. The purposive sampling technique was used to select participants, while semi-structured in-depth interviews were used for data collection. Data analysis was done using a thematic approach. The chapter further highlighted all ethical considerations followed in the study. The next chapter presents results of the study.

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This study aims to achieve three main objectives that were presented in the first chapter. To achieve these objectives, interviews were conducted to collect qualitative data from employees at the eThekweni Municipality. This chapter presents the findings of the study. The chapter is organised into four main sections. Section 4.2 presents the demographic profiles of the participants. Section 4.3 discusses the main findings. Section 4.4 concludes the chapter.

#### **4.2 Demographic profiles of the participants**

Demographic data is quantifiable statistical information about the participants in a study (Attiga et al. 2018). This data usually comprises the characteristics of participants such as age, gender, level of education and race, among other personal attributes. Demographic data is essential in determining whether the participants of a study are sufficiently representative to produce robust results that can be applied to the total population. In the context of this study, data was collected from 30 participants who are municipal employees across various units of the municipality. To protect the identities of the participants, numbers (1-30) were used as pseudonyms. Pseudonyms were used to ensure anonymity and confidentiality (Vorhölter 2021). Table 4.1 presents descriptive statistics on the demographic profiles of the 30 participants of the study.

**Table 4. 1: Summary statistics of the demographic profiles of participants (N=30)**

		Frequency (N)
Gender	<i>Female</i>	13
	<i>Male</i>	17
Age of participants (Years)	<i>Minimum</i>	27
	<i>Maximum</i>	62
	<i>Mean</i>	44
Education level	<i>Matric</i>	2
	<i>Postgraduate Diploma</i>	15
	<i>Bachelors/Honours</i>	10
	<i>Masters</i>	2
	<i>PhD</i>	1
Work experience (Years)	<i>Minimum</i>	2
	<i>Maximum</i>	24
	<i>Mean</i>	12
Municipal Unit where participants were drawn	<i>Office of the Municipal Manager</i>	3
	<i>Human Settlements</i>	3
	<i>Water Services Department</i>	2
	<i>Customer Services</i>	15
	<i>Other</i>	7

Source: Author's own table

The table shows that most of the participants (57%) were males, indicating male dominance, which is usually the case in most government workplaces in South Africa. The average age for the sampled participants was 44 years, and the youngest participant was 27 years old, while the oldest participant was 62 years old. This suggests that most of the participants were adults and had the cognitive ability to truthfully provide data for the study (MacLeod et al. 2016). About 93% of the participants had a post-matric qualification, indicating that most participants possessed the skills, educational competence, and expertise required to perform specialised tasks in their respective departments (Didier 2021). In addition, the summary statistics show that the study sample was sufficiently distributed across

several units of the municipality. More precisely, 15 participants were drawn from the customer services unit, 6 from the human settlements unit, another 6 from the municipal manager's office, 3 from the water services unit. This distribution across several municipal units is important because it shows the sample is a representation of the population, which improves the quality and credibility of the study (Omair 2014). Further, the average years of experience for the sampled participants was 12 years, and the participant with the least number of years working in the municipality was 2 years, while the participant with the greatest number of years had 24 years of experience. This indicates that participants were generally experienced, which implies that the data collected from these participants would generally be robust.

### **4.3 Results**

As explained in the previous chapter, the thematic approach was adopted to analyse the qualitative data collected from 30 municipal employees. Themes were generated according to the objectives of the study as outlined in the preceding chapters. More precisely, each objective of the study is presented as a theme, which contains several sub-themes (i.e., core ideas). Following Hill et al. (2005) and Jalma (2008), this study used core ideas to categorise smaller nuances of information within each theme. Thus, the study presents the cross-analysis of core ideas through the frequency of their occurrence as per the data collected from the interviewed participants. Jalma (2008) used this approach and further categorised core ideas into rare, variant, typical and general, according to the frequency (i.e., occurrence) of each core idea in each theme. Following this approach, this study categorises core ideas raised by 30% or less of the participants as Rare, while those raised by more than 30% but less than 50% of the participants are labelled Variant. On the other hand, core ideas raised by more than 50% but less than 70% of the participants are labelled Typical, while those raised by 70% or more of the participants are labelled General. Table 4.2 provides a summary of the results according to the three themes: core ideas, the frequency of each core idea, and the classification of the frequency.

**Table 4. 2: Summary of study findings**

<b>Theme</b>	<b>Sub-theme</b>	<b>Frequency</b>	<b>Class</b>
1. Project management challenges in the eThekweni Municipality	<i>Limited financial resources</i>	63%	Typical
	<i>Vandalism and illegal connections</i>	43%	Variant
	<i>Human resources skills shortages</i>	37%	Variant
	<i>Political interference and corruption</i>	37%	Variant
	<i>Lack of stakeholder consultation</i>	33%	Variant
	<i>Informal settlements</i>	33%	Variant
	<i>Poor planning and coordination</i>	20%	Rare
2. Impact of project management challenges on service delivery	<i>Delays in service delivery</i>	77%	General
	<i>Inadequate service</i>	73%	General
	<i>Service delivery protests</i>	37%	Variant
	<i>Poor infrastructure maintenance</i>	20%	Rare
3. Solutions to project management and service delivery challenges.	<i>Improved governance</i>	60%	Typical
	<i>Effective human resources management</i>	53%	Typical
	<i>Stakeholder consultation and participation</i>	43%	Variant

Source: Author's own table

#### **4.3.1 Theme 1: Project management challenges in the eThekweni Municipality**

This theme is aligned to the first objective of the study, which sought to examine the project management challenges experienced by the eThekweni Metropolitan Municipality. Accordingly, seven (7) issues were identified as key project management challenges in the municipality. The study then uses the identified challenges as core ideas for the first theme. As highlighted earlier in Table 4.2, the challenges identified by participants were vandalism and illegal connections, poor planning and coordination, lack of stakeholder consultation, human resources skills shortages, limited financial resources, informal settlements, and political interference. Detailed discussions of these challenges are provided in this section.

#### 4.3.1.1 Limited financial resources

South African municipalities, like those of other developing countries, are financially constrained when it comes to undertaking massive infrastructure projects (Oosthuizen and Thornhill 2017; Spires and Shackleton 2018). Consistently, 63% of the participants in this study suggested that the eThekweni Municipality is not an exception. Like in other KwaZulu Natal provincial municipalities, participants suggested that financial resource constraints are a major challenge in both project management and service delivery in the eThekweni Municipality. Participants argued that the budgets for projects linked to key services like water, sanitation, and transport are usually constrained to the extent that there will not be effective project management and optimum service delivery. While municipalities have limited sources of income, the literature generally cites the non-payment of local government services as a key source of constrained financial resources across South African municipalities (Khambule 2020; Murwirapachena et al. 2022; Nel and Rogerson 2016). In this context, Participant 1 stated that “*sanitation in hostels and other low-income houses are disastrous and the municipality has an overload of residents in those residential areas. Most of these residents do not pay for local government services which means there is excess demand for local services, when compared to income*”. This implies that there is need to improve revenue collection and funding from government in order to improve project management in the municipality.

#### 4.3.1.2 Vandalism and illegal connections

About 43% of the participants identified vandalism and illegal connections as challenges that negatively affect both project management and service delivery in the eThekweni Municipality. Generally, the illegal connection of electricity and water is a problem that commonly exists in many communities across the municipality. One participant stated that “*communities are illegally connecting to public service infrastructure, which makes it difficult for the municipality to generate sufficient income needed to sustain both service delivery and infrastructure development*”. Apart from

the loss of services' income, evidence exists that illegal connections damage public infrastructure and constrain the ability of the municipality to raise income (Mottiar 2019; Selokela and Langerman 2019).

In terms of vandalism, participants argued that both project management and service delivery are susceptible to deliberate destruction, especially when communities protest. This generally derails and delays municipal projects as funds are usually reallocated to address the deliberate damage caused by communities. Generally, participants argued that *“protests actions usually lead to the vandalism of existing infrastructure, resulting in funds allocated for certain projects being converted towards repairing the damages. This is usually the case when such vandalism occurs on infrastructure for basic services where restoration becomes urgent”*. Apart from protest actions, municipal infrastructure is also vandalised when people steal copper pipes and other cables, which are later sold to scrap yards. This is a problem that is also reported in several other studies in the literature and has severe financial and service delivery consequences (Geldenhuys 2022; Moagi 2021; Mottiar 2021).

#### 4.3.1.3 Shortages of human resources

The shortage of skilled human resources is a major challenge for project management across South African municipalities (Dikotla 2019; Monkam 2014; Nkosi 2015). In the context of this study, 37% of the participants suggested that project management in the eThekweni Municipality is critically challenged by the lack of adequately skilled personnel. The argument raised by participants was that the municipality currently experiences skills and capacity deficiencies. More precisely, one participant stated that *“the municipality is genuinely committed towards the economic empowerment of its communities and currently has many projects in place. However, most of its workers do not have the required skills to execute duties aligned to those projects”*. Generally, this lack of skills encompasses both the ability and competence of municipal workers to execute tasks and is a major cause of the poor performance in the municipality. The lack of skills is not only attributed to municipal employees even some of the contractors hired by the municipality to provide services do lack the skills and competences required for effective project management and service delivery. While this is a major

concern for the eThekweni Municipality, literature provides evidence that most South African municipalities are in the same predicament (Makapela and Mtshelwane 2021; Masiya et al. 2021). This implies that South African municipalities up-skill and capacitate human resources in order to achieve better project management and service delivery outcomes.

#### 4.3.1.4 Corruption and political interference

Various studies in the literature identify corruption as a major challenge affecting local government service delivery in South Africa (Masuku and Jilli 2019; Mngomezulu 2020; Munzhedzi 2016). The common types of corruption usually cited in the literature include bribery, nepotism, overpaying, false invoices and fronting in Black Economic Empowerment (BEE) companies (Lekubu 2013; Mantzaris 2017). Likewise, 37% of the participants noted that corruption and political interference are major project management challenges in the eThekweni Municipality. Political interference in this case contributes to poor governance. One participant stated that “*political factionalism, in-fighting, and violence generally shape what happens within municipalities. In most cases, there is little appreciation and patience for issues of good governance due to political differences*”.

Participants also revealed that political motives and cadre deployment to official positions within the municipality are challenges in both project management and service delivery. The presence of corruption and bribery by political office bearers is rampant within the municipality. For example, “*ward councillors are, in most cases, corrupt and there is a lot of bribery that goes on for people to get low-cost houses provided by the municipality*”.

Further, participants noted the presence of political interference in the tendering process in some municipal projects. They generally raised the point that “*political interference in the issuing of tenders results in good governance processes being ignored. Threats from influential political cadres to allocate them tenders and do corruption and fraud where there are incompetent companies resulting in funds squandered, poor work quality and incompleteness of tenders. Tender processes and*

*selection processes take long resulting in delays to service delivery*". In the municipalities, service delivery and project management process are vulnerable to political exploitation, particularly in the tendering process. Political interference and corruption, especially in supply chain management, have a devastating effect on water supplies, sewage systems, energy provision, roadways, and waste management (Mngomezulu 2020).

#### 4.3.1.5 Lack of stakeholder consultation

About 33% of the participants identified the lack of stakeholder consultations as a major challenge for effective project management in the municipality. Stakeholder consultations, in this case, imply the process in which municipalities interact with the public, particularly impacted or interested persons, organisations, and government agencies, prior to making decisions. Generally, South African municipalities are usually criticised for lacking effective and sincere citizen participation in key decision-making on important matters (Molale 2019; Ndaguba and Hanyane 2019; Tshamano et al. 2021).

In this regard, some participants specifically stated that *"the lack of stakeholder consultations is a challenge in the eThekweni Municipality. The municipality does not constantly and sincerely communicate with residents, adequately informing them about current projects and challenges experienced. Generally, the municipality is not proactive and is usually reactive in dealing with service delivery challenges and the project management gaps. In most cases, stakeholder will have to ask for them to know what is going on in their own communities because the municipality does not readily provide that information"*. This implies that the municipality is not responsive as there is poor consultation and communication with the stakeholders. Many municipalities fail to achieve the objectives of the Integrated Development Plan (IDP) due to poor stakeholder consultation, which forms part of informed decision-making (Molale 2019).

#### 4.3.1.6 Informal settlements

The emergence of informal settlements is a continuous problem across South African municipalities (Olaniyan et al. 2019; Pan et al. 2018). Informal settlements refer to any dwelling, shelter, or settlement that is unlawful and falls outside of government or municipal jurisdiction and regulation (Geyevu and Mbandlwa 2022; Marutlulle 2017). Consistently, 33% of the participants argued that informal settlements are creating several challenges for project management in the eThekweni Municipality. The argument raised was that informal settlements increase the demand for municipal services, consequently straining municipal resources. Some participants raised the concern that *“there is a continuous emergence of informal settlements which significantly strain municipal resources towards both project management and service delivery. Generally, these informal settlements are commonly established on land that is not serviced putting a further burden on the municipality to provide services to these settlements”*.

Equally, cases of illegal connections and non-payment of services are usually high across many informal settlements (Marutlulle 2017). This consequently affects the ability of the municipality to raise revenue, manage infrastructure projects, and effectively provide services. This reality was also confirmed by participants in this study, who indicated that *“the growth of informal settlements in the eThekweni Municipality is leading to illegal connections and the increased non-payment of local government services”*. Generally, participants linked informal settlements to a variety of socioeconomic issues, including high crime rates and damage to public infrastructure. This generally affects the implementation and management of projects in the municipality.

#### 4.3.1.7 Poor planning and coordination

About 20% of the participants highlighted poor planning and coordination as a challenge experienced in both project management and service delivery in the municipality. In this context, poor planning implies a lack of a clear picture of the expected project and service delivery outcomes. The lack of qualified personnel is

usually cited in the literature as a key challenge across South African municipalities (Masuku and Jili 2019; Mawela et al. 2017; Van der Walddt et al. 2018). In the context of this study, some participants stated that *“time planning is one of the critical challenges in the municipality as there are no sufficient time planners who are qualified”*. Consequently, there is poor execution of planning, which is a major challenge to project management in the municipality. The lack of integration and coordination of the different municipal spheres was also raised as a key challenge to project management. One participant explained this point by arguing that the *“lack of a proper integrated approach involving all spheres of government in the role of human settlements is a challenge in the municipality. Generally, there is slow special attention towards increasing the supply of housing to meet the high demand”*. This implies that projects need to be effectively planned and coordinated to be successful. Without comprehensive plans and coordination, municipalities are not able to effectively meet the needs of their communities, resulting in a rise in protests and demonstrations (Ndevu 2019; Pieterse et al. 2021).

#### **4.3.2 Impact of project management challenges on service delivery**

The second theme, which is aligned to the second objective, sought to assess the effect of the identified project management challenges on service delivery in the municipalities. Participants highlighted the impact of the identified project management challenges on service delivery based on their experiences and knowledge. The impact of the identified project management challenges on service delivery was comprehensively discussed and the following four sub-themes emerged: poor infrastructure maintenance, delays in service delivery, inadequate service provision and service delivery protests. The sub-themes are discussed in detail below.

##### **4.3.2.1 Delays in service delivery**

Challenges faced by municipalities have significantly increased the lead time it takes for residents to attain basic service from the municipality (Ndevu 2019; Ndevu and Muller 2017). Delays in service delivery in this context mean taking more time than

planned in providing municipal services. Consistently, 77% of the participants highlighted that delays in service delivery come from the identified project management challenges. Participants argued that the lead time it takes for residents to attain basic services has increased significantly. *“Customers are dissatisfied with the service and cast no confidence in the administration and the backlogs in water, sanitation, electricity, roads and refuse removal have direct impact on house delivery program. Corrupt leaders sell houses and manipulate the list for beneficiaries making the rightful beneficiaries homeless due to delays in service delivery”*. This implies that good administration and the elimination of corruption are needed to minimise service delivery delays and improve customer satisfaction. Although housing and service backlogs are linked to apartheid-era legislation, corruption has been identified as a significant element that contributes to backlogs and service delivery delays (Mabebe 2021).

#### 4.3.2.2 Inadequate service provision

Despite municipalities not complying with this legal requirement, the provision of sufficient services is contemplated in the South African Constitution (Act 108 of 1996) (Masuku and Jilli 2019). Inadequate service provision in this context refers to providing services that are insufficient to meet the needs of the community (Makalela 2021). Likewise, 73% of the participants highlighted that identified project management challenges lead to inadequate service provision in the municipality. The participants argued that the supply of services to the customers was less than the demand. One participant stated that *“the municipality is running short of electricity of the areas has running without electricity for a month.”* The participants also revealed that the inadequate provision is accompanied by deteriorating quality of services. *“There is lack of basic needs such as water, house and electricity and poor quality of water due to corruption and fraud”*. This implies that household access to water, power, and sanitation has been less reliable in the municipality. Since the beginning of South Africa's democracy, household access to water, power, and sanitation has been less reliable (Ngcamu 2019).

#### 4.3.2.3 Service delivery protests

Marginalised populations are becoming more dissatisfied with municipal service delivery, leading to protests (Joseph and Williams 2022; Zwane and Matsiliza 2022). Service delivery protests refer to a series of civil disturbances occurring in South African metropolitan regions due to inadequate service delivery (Morudu 2017). About 37% of the participants highlighted that project management challenges lead to service delivery protests. One participant stated that, “*poor execution of projects, results in no services offered or limited service leading to communities being dissatisfied, resulting in protests*”. The participants revealed that the service delivery protests are at times associated with vandalism of infrastructure and illegal connections. “*Sprawling spatial form hinders effective delivery services, resulting in insufficient resources to manage an ever-growing population. This leads to high crime, unrest and demonstrations or protests, disrupting business and transport and transport routes as well as damaging existing infrastructure*”. This implies that there is a need for comprehensive solutions to service delivery challenges to minimise protests and vandalism of infrastructure. South Africa has seen a dramatic surge in violent and disruptive demonstrations over service delivery (Zwane and Matsiliza 2022).

#### 4.3.2.4 Poor infrastructure maintenance

The commitment and obligation of the municipality to provide critical community services is centred on the creation and upkeep of infrastructure (Lebek et al. 2021; Rogerson 2020). There is a deterioration in service delivery due to poor infrastructure maintenance (Mamabolo 2016; Mawela et al. 2017; Reddy 2016). Likewise, 20% of the study participants identified poor infrastructure maintenance as an impact of the identified project management challenges on service delivery in the municipality. Poor infrastructure maintenance is recorded for all projects, including transportation, water and sanitation, and electricity. One participant stated that, “*buses are being provided by the municipality but the problem is that buses are being outsourced. Buses get broken now and then. Durban Solid Waste (DSW) and Parks are not doing their job. The Parks Unit does not clean up the road and parks*”. The argument that was raised was that limited financial resources lead to infrastructure breakdowns. “*Climate*

*change has resulted in floods that damaged infrastructure such as water pipes and dams filled to over spilling. The process of repairing infrastructure is very long and with no immediate funds*". This implies the need to avail more funding to improve infrastructure maintenance and service delivery. South African municipalities face financial constraints to effectively maintain service infrastructure, resulting in the fast degradation of assets and frequent interruptions to service delivery (Reddy 2016).

### **4.3.3 Solutions to project management and service delivery challenges**

The third theme is aligned to the third objective, which sought to recommend possible solutions to the identified project management and service delivery challenges. The participants highlighted the solutions to project management and service delivery based on their experience. Three core ideas that were identified are: effective human resources management, stakeholder consultation and improved governance. These core ideas are discussed in detail below.

#### 4.3.3.1 Improved governance

The Constitution of South Africa (Act 108 of 1996) highlights that municipalities are responsible for providing essential services to the community and should be accountable and transparent and should improve governance (Reddy 2016; Sibanda and von Solms 2019). About 60% of the participants highlighted that improved governance enhances project management and service delivery. The participants revealed the need for improved accountability and transparency in the municipality. *"Work remains on ensuring the city transparently and accountably manages and delivers services to community at least cost per unit delivered"*. The participants also argued the need to improve governance and combat corruption in service delivery and project management. *"Corruption must be reported and followed up with arrests and accountability as well as transparency must be exercised in public projects. Systems must be placed to monitor and report progress"*. This implies that transparency and accountability should be exercised to curb corruption. Maladministration and

corruption, caused by the absence of accountability systems are the primary causes of poor service delivery in municipalities (Thebe 2017).

#### 4.3.3.2 Effective human resources management

Municipalities should ensure that there is effective talent recruitment, trained, developed and motivated to enhance service performance (Chipunza et al. 2018). Human resources management refers to the effective management of people in an organisation to efficiently achieve set objectives (Van der Waldt et al. 2018). About 53% of the participants suggested effective human resources management as a solution to the identified project management and service delivery challenges. The participants revealed that the municipality needs to have effective recruitment where skilled personnel are hired. *“The municipality should employ qualified officials on specific designation”*. The participants argued that municipalities may not work effectively when the skills of the employees are insufficient, and training and development capacitate municipal workers. *“Some failures are due to incompetence so the municipality must have capacity enhancement by technical support and collaborating with academia with municipal learning partnerships and networks as this will help in delivery of quality services”*. This implies that collaboration with the academic community in training and development programmes improves service delivery. The Municipal Demarcation Board (MDB) underlined the need to strengthen present municipal arrangements for skills development in collaboration with other stakeholders (Bwowe and Marongwe 2018).

#### 4.3.3.3 Stakeholder consultation

The objective of stakeholder consultation is to assist municipalities in making informed decisions that represent the concerns and interests of the stakeholders who may be impacted (Jacobs et al. 2019; Ndaguba and Hanyane 2019). Consistently, 43% of the participants highlighted that stakeholder consultation is a solution to project management and service delivery challenges. The participants revealed that there is a need to include and consult stakeholders in municipal planning activities. *“Proper*

*planning should be monitored, and all stakeholders should be involved. The municipality needs to work hand in hand with Eskom, visit door to door to check if there is any illegal connection*". The participants argued that the objective of public consultation and involvement is to assist municipalities make better choices that represent the service delivery concerns and interests of the stakeholders. One participant stated that *"the city should do more to capacitate stakeholders to engage in formal processes. Consultation is key in achievement, and it is advisable to engage and publicly avail quarterly service delivery and budget implementation programmes and reviewing the integrated development plan"*. This implies that stakeholder participation is a significant step towards building an inclusive municipality that meets the service needs of the communities. Stakeholder consultation yields multiple perspectives which strengthens planning and decision-making for improved service delivery (Mawela et al. 2017).

#### **4.4 Conclusion**

This chapter presented the findings of the study in the form of qualitative data that was collected utilising an interview guide. The chapter consisted of two parts. The first part highlighted the demographic statistics of the sample. The demographic statistics were based on the information collected from the participants on gender, age, educational qualification, experience, and the unit, which the participants work in. The study's results, which were based on the goals outlined in Chapter One, were provided in the chapter's second section. The core ideas or sub-themes that emerged from the data were discussed in detail. The challenges faced in project management were highlighted and these included vandalism and illegal connections, poor planning and coordination, lack of stakeholder consultation, human resource skills shortages, limited financial resources, informal settlements, and political interference. The chapter also presented the impact of the challenges on service delivery. In addition, the solutions to service delivery and project management challenges were comprehensively discussed in the chapter. The next chapter presents the recommendations and conclusions based on the study findings presented in this chapter.

## **CHAPTER 5**

### **CONCLUSION**

#### **5.1 Summary**

The aim of the study was to explore the link between project management and service delivery in the eThekweni Metropolitan Municipality. This aim was achieved by satisfying three main objectives set in the study. The first objective was to examine the project management challenges experienced in the eThekweni Metropolitan Municipality. The second objective was to examine the impact of the identified project management challenges on service delivery in the municipality. Finally, the third objective sought to recommend possible solutions to the identified project management and service delivery challenges in the municipality.

The study adopted a qualitative research approach where qualitative data collected from 30 municipal workers through interviews was analysed using the thematic approach. Each objective of the study was used as a theme during the analysis and core ideas that emerged under each theme were discussed as sub-themes. Conclusively, several key findings were reported under each of the three themes.

First, seven key challenges associated with project management in the eThekweni Municipality were reported. More precisely, these challenges were vandalism and illegal connections, poor planning and coordination, lack of stakeholder consultation, shortage of human skills, constrained financial resources, sprawling informal settlements, and political interference. The challenges faced by the municipality emanate from both internal and external sources. Internal sources of the challenges pertain to constraints and barriers faced in project management and service delivery within the municipality. The internal challenges faced by the municipality in service delivery are a shortage of human skills, constrained financial resources and poor planning and coordination. Internal challenges are within the control of the organisation, and it has significant influence over them. Although the internal

challenges are within the control of the municipality, they can persist for a long time and have a negative impact on service delivery. The external challenges faced by the municipality indicate outside constraints that impact on service delivery. Municipalities are close to the citizens as the epicentre of service provision and an avenue where local government interacts with the stakeholders; hence, external challenges are persistent.

Second, the impact of the identified challenges on service delivery and project management was discussed. Specifically, the challenges lead to poor infrastructure maintenance, delays in service provision, inadequate provision of service and service delivery protests. The management of projects and the provision of services are negatively impacted by these difficulties. Protests against service delivery as a consequence of these problems are an appropriate indicator of stakeholders' expressed dissatisfaction. The impact reflects the absence of the capacity of the municipality to meet the needs of the community.

Thirdly, key solutions to managing the challenges faced by eThekweni Municipality were reported. The solutions were improved governance, effective human resources management and stakeholder consultation. The solutions show that they are designed to manage the conduct and interactions of the stakeholders in the municipality. These solutions can be interpreted as a way to capacitate the municipality in order to improve service delivery and project management. Effective human resources management gives the municipality the critical assets (human resources); stakeholder consultation gives information for informed decision-making; and improved accountability gives the tools needed to enhance project management and service delivery.

## **5.2 Recommendations**

Based on the study findings, the study proffers three recommendations. First, the study recommends ethical leadership in order to address the challenges faced in project management. Ethical leadership ensures that there is transparency and accountability in the use of municipal resources resulting in efficiency in project management and service delivery. Ethical leadership supports improvement in service

delivery and project management and enables the municipality to serve the interests of the stakeholders. Ethical leadership provides a platform to adhere to the set standards in project management, building trust and accountability between the municipality and its stakeholders. Ethical leadership ensures that both internal and external challenges are addressed in the municipality, as it is both inward and outward looking.

The second recommendation proffered by the study is on the impact of the identified project management challenges on service delivery. The study recommends capacitating the municipality. Capacitation refers to the availing of the resources needed by the organisation to achieve its objectives. The resources availed to manage the impact of the challenges include funding, skilled human resources, and information. To improve service delivery, municipality should increase their capacity including investment in professionalism and resources to ensure effective project management and service delivery.

The third recommendation proffered by the study pertains to the link between project management and service delivery. The study recommends comprehensive planning to improve project management and service delivery. Comprehensive planning integrates the key components of project management and service delivery, highlighting the risks and contingencies that are needed. Planning aids in stakeholder consultation, procurement and scope management, which are critical to service delivery and project management in the municipality.

The fourth recommendation, is that training and development in project management, monitoring and evaluation must be effective and efficiently executed. Municipal personnel, policy makers, and managers must receive this training. This will improve the transfer of abilities, information, and a service-oriented mindset. Knowledge and abilities will assist efficient resource allocation and project completion.

### **5.3 Areas for future work**

Although the study was comprehensive, it did not cover all the areas of project management and service delivery in the local government. The study was specific in

adopting a qualitative approach to explore the link between project management and service delivery in South Africa. Therefore, quantitative and statistical approaches can be adopted in the future to establish a statistical and numerical link between project management and service delivery. In this way it can be established if similar results can be obtained and diverse perspectives can be developed on project management and service delivery. In addition, the study is based on the case of eThekweni Metropolitan Municipality and the findings of the study may not be directly transferred or generalised to other municipalities in South Africa. Future studies may adopt a comparative approach where two or more municipalities are analysed. Such studies will allow for a comprehensive analysis of the link between project management and service delivery in each municipality and benchmark municipalities based on the obtained comparative results.

## REFERENCES

- Abrahamse, D.R., 2004. *The potential role of project management in category B municipalities*. Doctoral dissertation, University of Pretoria.
- Adams, W.C., 2015. Conducting semi-structured interviews. *Handbook of Practical Program Evaluation*, 4, pp.492-505.
- Andersen, E.S. & Jessen, S.A. (2017). Project Maturity in Organisations. *International journal of project management*, 21.
- Aubry, M., Hobbs, B. and Thuillier, D. 2007. A new framework for understanding organisational project management through the PMO. *International Journal of Project Management*, 25(4), pp.328-336.
- Babbie, E.R., 2011. *Introduction to social research*. Wadsworth Cengage learning.
- Battaglia, M.P., 2011. Nonprobability sampling. *Encyclopedia of survey research methods*, 1, pp.523-526.
- Berg, B.L., and Lune, H., 2012. Qualitative research methods for the social sciences. *Journal of Human Lactation*, 31(2), pp.223-228
- Betchoo, N.K., 2015. *Managing workplace diversity: A contemporary context*. eBooks and textbooks from bookboon.Com.
- Boyne, G. A. (2014). Sources of Public Service Improvement: A Critical Review and Research Agenda. *Journal of public administration research and theory*, 13(3), pp.367-394
- Braun, V. and Clarke, V., 2014. What can “thematic analysis” offer health and wellbeing researchers?
- Brown, K, Parker, R and Ryan N 2000. New models of service delivery in the public sector: Commercialising government services. *International Journal of Public Sector Management*, 13(3), pp.206-221.

Bwowe, P.W. and Marongwe, N., 2018. Implementing a total reward strategy in selected South African municipal organisations. *SA Journal of Human Resource Management*, 16(1), 1-9.

Chipunza, C., Monnapula-Mapesela, M. and Dzansi, L.W., 2018. Municipal employees' perceptions of political interference in human resource management practices: Evidence from the Free State Province in South Africa.

Christensen, T. and Laegreid, P., 2017. *Transcending new public management*. London, Taylor & Francis.

Clarke, V. and Braun, V., 2013. Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, 26(2).

Cloete J. J. N, (2021), South African Public Administration and Management, Pretoria, J L van Schaik.

Creswell, J. W., Plano Clark, V. L., Gutmann, M. L. and Hanson, W. E., 2014. An expanded typology for classifying mixed methods research into designs. A. *Tashakkori y C. Teddlie, Handbook of Mixed Methods in Social and Behavioral Research*, pp.209-240.

Creswell, J. W., 2011. Controversies in mixed methods research. *The Sage handbook of qualitative research*, 4, pp.269-284.

Creswell, J. W., 2021. *A concise introduction to mixed methods research*. SAGE publications.

Davis, K., 2017. An empirical investigation into different stakeholder groups perception of project success. *International Journal of Project Management*, 35(4), pp.604-617.

Darawsheh, W., 2014. Reflexivity in research: Promoting rigour, reliability and validity in qualitative research. *International Journal of Therapy and Rehabilitation*, 21(12), pp.560-568.

Department of Cooperative Governance and Traditional Affairs or COGTA 2020

Dikotla, M. A., 2019. Knowledge sharing in selected municipalities of Limpopo Province, South Africa. *South African Journal of Libraries and Information Science*, 85(1), 1-11.

Dodgson, J. E., 2019. Reflexivity in qualitative research. *Journal of Human Lactation*, 35(2), pp.220-222.

Ehlers T and Lazenby, K. (2020), Strategic Management Southern African Concept and cases, Pretoria: Van Schaik.

Ethicist, P., 2015. Simplifying the complexity of confidentiality in research. *Journal of Empirical Research on Human Research Ethics*, 10(1), pp.100-102.

Fayol. H., 1930 – Principles of management

Fleming, J. and Zegwaard, K. E., 2018. *International Journal of Work-Integrated Learning*, 19(3), pp.205-213.

Flick, U. ed., 2011. *The SAGE handbook of qualitative data analysis*. Sage.

Frinsdorf, O., Zuo, J. and Xia, B., 2014. Critical factors for project efficiency in a defence environment. *International Journal of Project Management*, 32(5), pp.803-814.

Fugard, A. J. and Potts, H. W., 2014. Supporting thinking on sample sizes for thematic analyses: a quantitative tool. *International Journal of Social Research Methodology*, 18(6), pp.669-684.

Fusch, P. I. and Ness, L. R., 2015. Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), p.1408.

Geldenhuis, K., 2022. Electricity theft: The struggle to keep the lights on. *Servamus Community-based Safety and Security Magazine*, 115(3), 28-33.

Geyevu, M. M. and Mbandlwa, Z., 2022. Economic conditions that lead to illegal electricity connections at Quarry Road Informal Settlement in South Africa. *International Journal of Special Education*, 37(3).

Gibson, C., Medeiros, K.E., Giorgini, V., Mecca, J.T., Devenport, L.D., Connelly, S. and Mumford, M.D., 2014. A qualitative analysis of power differentials in ethical situations in academia. *Ethics & Behavior*, 24(4), pp.311-325.

Hill, C. E., Knox, S., Thompson, B.J., Williams, E .N., Hess, S. A., and Ladany, N. 2005. Consensual qualitative research: An update. *Journal of Counselling Psychology*, 52: 196-205.

Hommel, L., Veldwisch, G. J., Harris, L. M. and Boelens, R., 2019. Evolving connections, discourses and identities in rural–urban water struggles. *Water International*, 44(2), pp.243-253.

Hollis, C., Sampson, S., Simons, L., Davies, E. B., Churchill, R., Betton, V., Butler, D., Chapman, K., Easton, K., Gronlund, T.A. and Kabir, T., 2018. Identifying research priorities for digital technology in mental health care: results of the James Lind Alliance Priority Setting Partnership. *The Lancet Psychiatry*, 5(10), pp.845-854.

Hyttinen, K., 2017. Project management handbook.1<sup>st</sup> edition. Kogan

Jacobs, C., Rivett, U. and Chemisto, M., 2019. Developing capacity through co-design: The case of two municipalities in rural South Africa. *Information Technology for Development*, 25(2), 204-226.

Jalma, K. S. 2008. Women's friendship dissolution: A qualitative study. PhD thesis, University of Minnesota Digital Conservancy. Available at <https://hdl.handle.net/11299/47085>.

Jamieson, S., 2016. Analyse qualitative data. *Education for Primary Care*, 27(5), pp.398-402.

Javadi, M. and Zarea, K., 2016. Understanding thematic analysis and its pitfall. *Demo*, 1(1), pp.33-39.

Joseph, J. E. and Williams, R., 2022. A Retrospective Analysis: ICT for Improved Municipal Service Delivery Amidst COVID-19. *EUREKA: Social and Humanities*, 2, 70-85.

Jowett, A., 2020. Carrying out qualitative research under lockdown-practical and ethical considerations. *Impact of Social Sciences Blog*. 1(1) pp.1-3.

Khan, Z. and Morshed, M., 2012. Implementing formal project management to local government projects. Project Management Institute.

Khambule, I., 2020. The effects of COVID-19 on the South African informal economy: limits and pitfalls of government's response. *Loyola Journal of Social Sciences*, 34(1), 95-109.

Klaus-Rosinska, Agata. 2019. *Success of research and research and development projects in the science sector*. Wrocław: Wrocław University of Science and Technology.

Koma, S. B. and Modumo, O. S., 2016. Whither public administration in South Africa? The quest for repositioning in the 21<sup>st</sup> century. *Africa's Public Service Delivery and Performance Review*, 4(3), pp.482-487.

Koops, L., van Loenhout, C., Bosch-Rekvelde, M., Hertogh, M. and Bakker, H., 2017. Different perspectives of public project managers on project success. *Engineering, Construction and Architectural Management*, 24(6), pp.1294-1318.

Kozarkiewicz, A. and Kabalska, A., 2016. Project strategy and strategic project management: the understanding and the perception of relevance among polish project management practitioners. *Project Management Development–Practice and Perspectives*, pp.187.

Landsman J. P (2020) *Breaking the grip of Poverty and Inequality in South Africa*, Pretoria: University Press.

Larson, E. (2015). *Project Management Structures*. (In Morris, P. W. G. & Pinto, J. K. *The Wiley guide to managing projects*. New Jersey: Wiley.

Lawrence, J. and Tar, U., 2013. The use of grounded theory technique as a practical tool for qualitative data collection and analysis. *Electronic Journal of Business Research Methods*, 11(1), pp.29-40.

Lawrence, F. and Rogerson, C .M., 2019. Local economic development agencies and peripheral small town development: Evidence from Somerset East, South Africa. *Urban izziv*, 30, pp.144-157.

Lebek, K., Twomey, M. and Krueger, T., 2021. Municipal failure, unequal access and conflicts over water—a hydro-social perspective on water insecurity of rural households in KwaZulu-Natal, South Africa. *Water Alternatives*, 14(1), 271-292

Lincoln, Y. S. and Guba, E. G., 1985. *Naturalistic inquiry*. Sage.

Mabeba, S.J ., 2021. The impact of corruption on service delivery: a topical matter in the South African Municipalities. *The Business and Management Review*, 12(1), 165-169.

MacLeod, S., Musich, S., Hawkins, K., Alsgaard, K. and Wicker, E. R., 2016. The impact of resilience among older adults. *Geriatric Nursing*, 37(4), 266-272.

Makapela, L. and Mtshelwane, N. D., 2021. Exploring the use and influence of human resource policies within South African municipalities. *SA Journal of Human Resource Management*, 19, 14.

Mamabolo, M. A., 2016. Provision of quality roads infrastructure in South Africa: rural villagers' perceptions, Polokwane municipality in Limpopo province. *Journal of Public Administration and Development Alternatives (JPADA)*, 1(2), 28-44.

Martens, C. D. P., Machado, F. J., Martens, M. L. and de Freitas, H. M. R., 2018. Linking entrepreneurial orientation to project success. *International Journal of Project Management*, 36(2), pp.255-266.

Marutlulle, N., 2017. Causes of informal settlements in Ekurhuleni Metropolitan Municipality: An exploration. *Africa's Public Service Delivery and Performance Review*, 5(1), 1-11.

Masiya, T., Davids, Y. D. and Mangai, M. S., 2021. Factors affecting the performance of South African municipal officials: Stakeholders' perspectives. *Commonwealth Journal of Local Governance*, (25), 97-115.

- Masuku, M. M. and Jili, N. N., 2019. Public service delivery in South Africa: The political influence at local government level. *Journal of Public Affairs*, 19(4), p.e1935.
- Massey, R. T., 2014. Exploring counter-conduct in upgraded informal settlements: The case of women residents in Makhaza and New Rest (Cape Town), South Africa. *Habitat International*, 44, pp.290-296.
- Mawela, T., Ochara, N. M. and Twinomurinzi, H., 2017. E-government implementation: A reflection on South African municipalities. *South African Computer Journal*, 29(1), 147-171.
- Maxwell, J. A., 2012. *Qualitative research design: An interactive approach*. Sage publications
- Mbaku, J. M., 2008. Corruption clean-ups in Africa: Lessons from public choice theory. *Journal of Asian and African studies*, 43(4), pp.427-456
- Mngomezulu, S., 2020. Political Interference in the Administration of Service Delivery in UMLALAZI Local Municipality of KwaZulu-Natal, South Africa. *Journal of Economics and Behavioral Studies*, 12(1 (J)), 38-45.
- Moagi, P.K, 2021. *Challenges in the delivery of water services in Sekhukhune District Municipality: a case of Makhuduthamaga Local Municipality* (Doctoral dissertation).
- Molale, T. B., 2019. Participatory communication in South African municipal government: Matlosana local municipality's Integrated Development Plan (IDP) processes. *Communicare: Journal for Communication Sciences in Southern Africa*, 38(1), 57-75.
- Monkam, N. F., 2014. Local municipality productive efficiency and its determinants in South Africa. *Development Southern Africa*, 31(2), 275-298
- Morgeson, F. V., 2013. Expectations, disconfirmation, and citizen satisfaction with the US federal government: Testing and expanding the model. *Journal of Public Administration Research and Theory*, 23(2), pp.289-305.

- Morudu, H. D., 2017. Service delivery protests in South African municipalities: An exploration using principal component regression and 2013 data. *Cogent Social Sciences*, 3(1), p.1329106.
- Mottiar, S., 2019. Everyday forms of resistance and claim making in Durban South Africa. *Journal of Political Power*, 12(2), 276-292.
- Mottiar, S., 2021. Shaping a Township: Self-connecting as “Counter conduct” in Umlazi, Durban. *Journal of the British Academy*, 9(s11), 93-106.
- Munzhedzi, P. H., 2016. South African public sector procurement and corruption: Inseparable twins? *Journal of Transport and Supply Chain Management*, 10(1), 1-8.
- Murwirapachena, G., Ifeacho, C. I. and Kabange, M. M., 2022. Non-payment culture and the financial performance of urban electricity utilities in South Africa. *Development Southern Africa*. <https://doi.org/10.1080/0376835X.2022.2051438>.
- Ndaguba, E. A. and Hanyane, B., 2019. Stakeholder model for community economic development in alleviating poverty in municipalities in South Africa. *Journal of Public Affairs*, 19(1), 1858.
- Ndevu, Z. J., 2019. Trust and organisational performance: A grounded theory approach for a South African district municipality. *SA Journal of Human Resource Management*, 17(1), 1-11.
- Ndevu, Z. and Muller, K., 2017. A conceptual framework for improving service delivery at local government in South Africa. *African Journal of Public Affairs*, 9(7), 13-24.
- Nel, E. and Rogerson, C. M., 2016. The contested trajectory of applied local economic development in South Africa. *Local Economy*, 31(1-2), 109-123.
- Ngcamu, B. S., 2019. Exploring service delivery protests in post-apartheid South African municipalities: a literature review. *The Journal for Transdisciplinary Research in Southern Africa*, 15(1), 9.
- Nkosi, S. M., 2015. Effects of training on employee commitment, retention and performance: A case study of a Local Municipality in South Africa. *European Journal of Business and Management*, 7(15), 104-108.

Olaniyan, T., Dalvie, M. A., Rössli, M., Naidoo, R., Künzli, N., de Hoogh, K., Parker, B., Leaner, J. and Jeebhay, M., 2019. Asthma-related outcomes associated with indoor air pollutants among schoolchildren from four informal settlements in two municipalities in the Western Cape Province of South Africa. *Indoor Air*, 29(1), 89-100.

Oluwatayo, J. A., 2012. Validity and reliability issues in educational research. *Journal of Educational and Social Research*, 2(2), pp.391-391.

Omaid, A., 2014. Sample size estimation and sampling techniques for selecting a representative sample. *Journal of Health specialties*, 2(4), 142.

Oosthuizen, M and Thornhill, C., 2017. The grant system of financing the South African local government sphere: Can sustainable local government be promoted?

Osborne, S. P., Radnor, Z. and Nasi, G., 2013. A new theory for public service management? Toward a (public) service-dominant approach. *The American Review of Public Administration*, 43(2), pp.135-158.

Otto, A., Hall, J. W., Hickford, A. J., Nicholls, R. J., Alderson, D., Barr, S. and Tran, M., 2014. A quantified system-of-systems modeling framework for robust national infrastructure planning. *IEEE Systems Journal*, 10(2), pp.385-396.

Overman, S. and Van Thiel, S., 2016. Agencification and public sector performance: A systematic comparison in 20 countries. *Public Management Review*, 18(4), pp.611-635.

Pan, S. M., Armitage, N. P. and van Ryneveld, M. B., 2018. Assessing equity: a way to improve sanitation service delivery in South African informal settlements. *Journal of Water, Sanitation and Hygiene for Development*, 8(3), 429-438.

Pandey, P. and Pandey, M., 2015. Research methodology: Tools and techniques. *Romania, European Union* pp 1-118.

Pepinsky, T. B., and Sacks, A., 2017. Bureaucracy and service delivery. *Annual Review of Political Science*, 20, pp.249-268.

Phillips, T., Saunders, R. K., Cossman, J. and Heitman, E., 2019. Assessing trustworthiness in research: a pilot study on CV verification. *Journal of Empirical Research on Human Research Ethics*, 14(4), pp.353-364.

Pieterse, A., du Toit, J. and Van Niekerk, W., 2021. Climate change adaptation mainstreaming in the planning instruments of two South African local municipalities. *Development Southern Africa*, 38(4), 493-508.

Pilkaitė, A. and Chmieliauskas, A., 2015. Changes in public sector management: establishment of project management offices—a comparative case study of Lithuania and Denmark. *Public Policy and Administration*, 14(2), pp.291-306.

Pollitt, C. and Bouckaert, G., 2017. *Public management reform: A comparative analysis-into the age of austerity*. Oxford University Press.

Reddy, P. S., 2015. *Post local governance and development in South Africa*, in P.S. Reddy and M. De Vries (eds.). *Local governance and development in South Africa post 1994*, Bruylant Publishers, Belgium.

Reddy, P. S., 2016. The politics of service delivery in South Africa: The local government sphere in context. *TD: The Journal for Transdisciplinary Research in Southern Africa*, 12(1), 1-8.

Rogerson, C. M., 2020. Using municipal tourism assets for leveraging local economic development in South Africa. *Bulletin of Geography. Socio-economic Series*, 48(48), 47-63.

Rolland, M., 2018. A change management framework to sustain administrative effectiveness after municipal elections. *Politeia (02568845)*, 37(1).

Roulston, K., 2016. Issues involved in methodological analyses of research interviews. *Qualitative Research Journal*. Vol. 16 No. 1, pp. 68-79.

Rossmann, G. B. and Rallis, S. F., 2016. *An introduction to qualitative research: Learning in the field*. Sage Publications.

Sabela T. Reddy P S (2021), *Readings on Local Government Management and Development a Southern African Perspective*, Cape Town: JUTA.

Sarker, A. E., 2006. New public management in developing countries: An analysis of success and failure with particular reference to Singapore and Bangladesh. *International Journal of Public Sector Management*, 2, pp.180-203.

Serry, T. and Liamputtong, P., 2013. Computer-assisted qualitative data analysis (CAQDAS). *Research methods in health: Foundations For Evidence-Based Practice*, pp.380-393.

Shah R. A. Khan A. Z. Khalil M. S. (2017). Project Management Practices in e Government Projects: A Case Study of Electronic Government Directorate (EGD) in Pakistan. *International Journal of Business and Social Science*. Islamabad. International Islamic University.

Sharma, G., 2017. Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3(7), pp.749-752.

Sibanda, M. M. M., 2012. Monitoring customer-focused quality service delivery in local government: Conceptual issues and perspectives for consideration. *Africa's Public Service Delivery and Performance Review*, 1(1), pp.4.

Sibanda, M. and von Solms, R., 2019. Devising a strategy for IT governance implementation in municipalities. A case study of South Africa. *The Electronic Journal of Information Systems in Developing Countries*, 85(2), 12067.

Silvius, A. G., Kampinga, M., Paniagua, S. and Mooi, H., 2017. Considering sustainability in project management decision making: An investigation using Q-methodology. *International Journal of Project Management*, 35(6), pp.1133-1150.

Sim, J., Saunders, B., Waterfield, J. and Kingstone, T., 2018. Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*, 21(5), pp.619-634.

Simon, M. K. and Goes, J., 2013. Assumptions, limitations, delimitations, and scope of the study. *Journal of Empirical Research on Human Research Ethics*, 14(4) pp. 259-269.

Sobantu, M., 2019. *A model for enhancing voluntary housing within a social development approach in South Africa*. University of Johannesburg, South Africa.

Sohi, A. J., Bosch-Rekvelde, M. and Hertogh, M., 2019. Practitioners' perspectives on flexible project management. *IEEE Transactions on Engineering Management*. 68, pp.911-925

South Africa state of cities report in 2011 <https://www.sacities.net/wp-content/uploads/2020/03/SACN-2011-Report.pdf>.

Stojcetovic, B., Lazarevic, D., Prlincevic, B., Stajcic, D. and Miletic, S., 2014. Project management: cost, time, and quality. 8th International Quality Conference at Centre for Quality, Faculty of Engineering, University of Kragujevac.

Taherdoost, H., 2016. Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research (April 10, 2016)*.

Tavares, A., Soares, D. and Estevez, E., 2016. Electronic governance for context-specific public service delivery: a survey of the literature. In *Proceedings of the 9th International Conference on Theory and Practice of Electronic Governance*, pp.135-138.

Thebe, T. P., 2017. Political education for good governance in South Africa's local government and communities. *African Journal of Public Affairs*, 9(5), 123-135.

Theofanidis, D. and Fountouki, A., 2018. Limitations and delimitations in the research process. *Perioperative Nursing*, 7 (3), pp. 155–163.

Tshamano, W., Shopola, A. and Mukonza, R., 2021. Unmasking merger problems from employees' perspectives: A case of the disestablished Aganang Local Municipality, South Africa. *Africa's Public Service Delivery and Performance Review*, 9(1), pp.11.

Van der Molen et al. (2021) *Outcome-based Governance: Assessing the Results*, Cape Town: Heinemann publishers.

Van der Waldt, G., 2001. Establishing a management by projects approach for service delivery. *Journal of Public Administration*, 36(4), pp.296-311.

Van der Waldt, G., 2016. Managing for excellence in the public sector.

Van der Waldt, G., Fourie, D., Jordaan, J. and Chitiga-Mabugu, M., 2018. Skills profile of technical staff in the South African local government sector: an empirical survey. *Problems and Perspectives in Management*, 16(1), 173-185v.

Venter, A. & Landsberg, C. (2011). Government and Politics in South Africa. 4th Edition. Pretoria: Van Schaik Publishers.

Walliman, N., 2010. *Research methods: The basics*. Routledge.

Wang, R., Li, X., Song, X., Dai, L. and Li, Y., 2019. A simulation approach based project schedule assessment. In *SIMULTECH*, pp.422-428.

Wilson, E. and Fox, A., 2013. Data collection. *School-based Research: A Guide for Education Students*, 2, pp.104-125

Zikmund, W. G., Carr, J.C. and Griffin, M., 2013. *Business Research Methods (Book Only)*. Cengage Learning.

Zwane, Z. and Matsiliza, N. S., 2022. Stakeholders' involvement in service delivery at eDumbe Municipality. *Journal of Local Government Research and Innovation*, 3, 45.

## APPENDICES

### Appendix 1: Interview questions scheduled for the municipal employees



#### **The nexus between project management and service delivery in the eThekweni Municipality**

##### **Interview schedule**

My name is Fikile Queen Mnembe (Student Number 20419462), I am registered for the degree of Master of Management Sciences in Public Administration at the Durban University of Technology. The title of my dissertation is "***The nexus between project management and service delivery in the eThekweni Municipality***". The study seeks to investigate the link between project management and service delivery in the eThekweni Metropolitan Municipality. This is an important study considering the project management challenges commonly experienced in South African municipalities.

Kindly take some few minutes to answer some questions. Your participation in this interview is voluntary and you may withdraw from the process at any moment without any consequence. The information collected through this interview is for academic purposes only and will be treated as confidential, with your identity remaining anonymous. Please know that this interview will be recorded, and the recording will be securely stored in a password-protected hard drive accessed only by me and my supervisor.

1. May you please tell me more about yourself? (*Please note this personal information is collected for statistical purposes only*).

*Probes:*

- a) Your age (optional);
- b) Your gender (optional);
- c) Your highest educational qualification;
- d) The Unit you work in;
- e) Your position in that Unit;
- f) Your years of experience in that position;
- g) Your years of experience in the municipality;
- h) The role of your Unit in project management; and
- i) The role of your Unit in service delivery.

2. What are some of the current service delivery projects undertaken by the municipality which you are aware of?

*Probes*

- a) Water service delivery related projects;
- b) Projects towards sanitation;
- c) Projects towards the provision of houses;
- d) Projects towards electricity services;
- e) Any other project note related to the services mentioned above.

3. From your professional point of view, what could be the main challenges experienced in managing the projects that you mentioned above?

*Probes:*

- a) Challenges in projects related water service delivery;
- b) Challenges in projects related sanitation services;
- c) Challenges in projects related the provision of houses;
- d) Challenges in project related to electricity;
- e) Challenges in project related to transport;
- f) Challenges in project related to any other service;

4. From your professional point of view, what could be the impact of the challenges explained above on service delivery?

*Probes:*

- a) Impact on water service delivery;
- b) Impact on provision of sanitation;
- c) Impact on the provision of houses;
- d) Impact on the provision of electricity services;
- e) Impact on the provision of transport services;
- f) Impact on any other service not mentioned above.

5. Based on the identified challenges and impacts of project management on service delivery, what would you suggest as possible solutions?

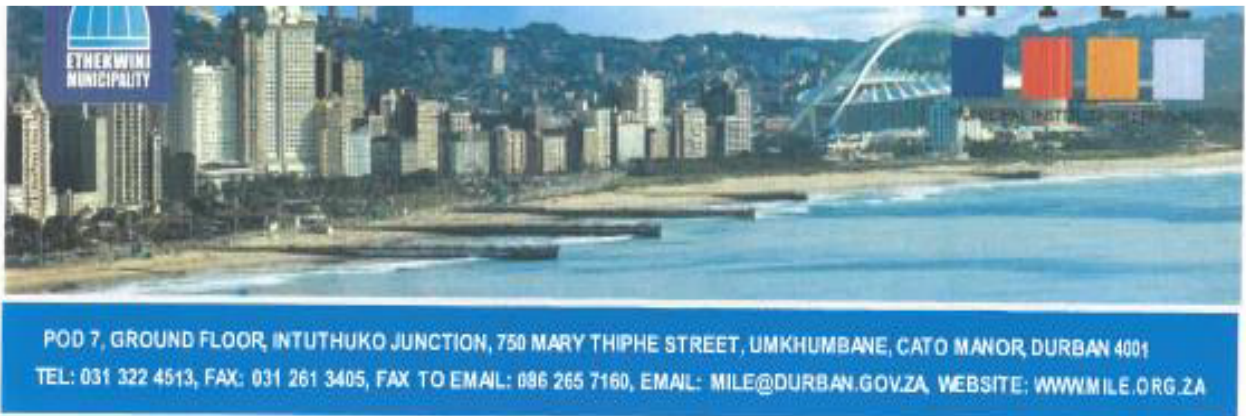
*Probes:*

- a) Towards challenges in projects related water service delivery;

- b) Towards challenges in projects related to sanitation;
- c) Towards challenges in projects related to the provision of houses;
- d) Towards challenges in projects related to the electricity;
- e) Towards challenges in projects related to transport;
- f) Towards challenges in projects related to any other service;

**Thank you very much for taking time to participate in this interview.**

## Appendix 2: Gatekeeper's letter for the municipal employees



For attention:  
Chair of Higher Degrees/ Ethics Committee  
Faculty of Management Sciences  
Department of Public Management and Economics  
Durban University of Technology  
Durban  
4001

13 July 2020

**RE: LETTER OF SUPPORT TO F.Q MNEMBE, STUDENT NUMBER 20419462 - GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A STUDY SITE**

I am pleased to inform you that the Sizakala Customer Services Unit and Municipal Institute of Learning (MILE) in eThekweni have considered a request from Fikile Queen Mnenbe to use eThekweni Municipality as a research study site leading to the awarding of a Master of Management Sciences in Public Administration degree and for the purposes of undertaking a research study entitled: *Exploring the nexus between project management and service delivery in the eThekweni Municipality*.

We wish to inform you of the acceptance of her request and hereby assure her of our utmost cooperation towards achieving her academic goals; the outcome which we believe will help the municipality improve its services. The student is reminded of the ethical considerations as well as the current COVID-19 related regulations as per the Disaster Management Act (2020) when conducting the research. In return, we stipulate as conditional that the student contacts the MILE office to present the results and recommendations of this study to the related unit/s on completion.

Wishing the student all the best in her studies.

.....  
Mr. Mavuso Tshabalala  
Head: Sizakala Customer Services Unit  
eThekweni Municipality

.....  
Dr. Collin Pillay  
Program Manager: MILE  
eThekweni Municipality

### Appendix 3: Informed Consent



## CONSENT

### Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Fikile Queen Mmembe 20419462, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: \_\_\_\_\_,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

\_\_\_\_\_  
Full Name of Participant  
Thumbprint

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time

\_\_\_\_\_  
Signature / Right

I, **Fikile Mmembe** herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Fikile Queen Mmembe  
Full Name of Researcher

07 October 2022  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Full Name of Witness (If applicable) Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Full Name of Legal Guardian (If applicable) Date

\_\_\_\_\_  
Signature

## Appendix 4: Ethical clearance letter



### **MANAGEMENT SCIENCES: FACULTY RESEARCH ETHICS COMMITTEE (FREC)**

3 March 2020

Student Name: **Ms Fikile Mmembe**

Student No: 20419462

Dear Ms FQ Mmembe

#### **MASTER OF MANAGEMENT SCIENCES: PUBLIC ADMINISTRATION**

**TITLE: Exploring the nexus between project management and service delivery in the eThekweni Municipality**

Please be advised that the FREC Committee has reviewed your proposal and the following decision was made: Approved – Ethics Level 2

Date of FRC Approval: 3rd March 2020

#### **MANAGEMENT SCIENCES: PUBLIC ADMINISTRATION**

Approval has been granted for a period of two years from the above FRC date, 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 JP Govender  
Chairperson: Faculty Research Ethics Committee

## Appendix 5: Chairperson: Faculty Research Ethics Committee



### LETTER OF INFORMATION

**Title of the Research Study:** The nexus between project management and service delivery in the eThekweni Municipality

**Principal Investigator/s/researcher:** Fikile Queen Mmembe, Bachelor of Public Administration Honours: Public Management

**Co-Investigator/s/supervisor/s:** Dr Genius Murwirapachena (PhD in Economics)

Dear Participant

My name is Fikile Queen Mmembe (Student Number 20419462), I am registered for the degree of Master of Management Sciences in Public Administration at the Durban University of Technology. The purpose of this study is to explore the nexus between project management and service delivery in the eThekweni Municipality. The study's objectives are to identify, examine, and suggest recommendations regarding the problems with project management and their consequences on service delivery in the eThekweni Municipality. The viewpoints of the respondents are crucial in order to accomplish the study's stated goals. As a result, I would like extend an invitation to you to take part in this interview.

**Outline of the Procedures:** They will be a formal session of cross-examination, consultation/interview/survey details with follow up questions depending on the answer session. The interview guide will take approximately 30 minutes to do the interviewing. The researcher will be using scribber and a recorder (audio or video) to capture the data.

**Risks or Discomforts to the Participant:** There will be no imaginable discomfort or any risk.

**Benefits:** There are no direct benefit to you participating in this study, however, information of findings from the study will be available to all the parties that will be interested in the form of article and publication.

**Reason/s why the Participant May Be Withdrawn from the Study:** The respondent was informed about the terms and conditions of the study Respondent has a right to withdrawn without being asked reasons

**Remuneration:** None

**Costs of the Study:** There will be no costs directed to participants

**Confidentiality:** The names of the people will be protected but it will depend on the participants if they are willing to or they are not willing to. Respondent has a right to remain anonymous. Before the researcher starts the session the participant will be informed about the confidentiality

**Research-related Injury:** The session will be conducted in the manner where there will be no harm, psychological and physical contact. The participants will be given questionnaire prior to the actual session so that they can prepare themselves.

**Persons to Contact in the Event of Any Problems or Queries:** My supervisor Dr G Murwirapachena on 031 373 5198 or [geniusM@dut.ac.za](mailto:geniusM@dut.ac.za). Myself : Fikile Queen Mnembe on 073 975 9160 or [fikile,mnembe@kznpremier.gov.za](mailto:fikile,mnembe@kznpremier.gov.za), or the Institutional Research Ethics Administrator on 031 373 2375, Complaints can be reported to the Director: Research and Postgraduate Support Dr. L Linganiso on 031 373 2577 or [researchdirector@dut.ac.za](mailto:researchdirector@dut.ac.za).

Your participation in this study will be highly appreciated.

Yours Sincerely,

---

Ms Fikile Mnembe