Investigating the effectiveness of the property management system of a selected municipality's lease register

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Mini-dissertation accepted in partial fulfilment of the requirements for the degree *Master of Business Administration* at the North-West University

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DECLARATION

I thus confirm that this dissertation is my unique work and has not recently been submitted to one more university with the end goal of a degree. Where use has been made of what was crafted by others, such work has been properly recognised in this dissertation.

I, Sita Mvubu, thus proclaim that I am completely mindful of the North-West University policy on counterfeiting, and I have played it safe to conform to the guidelines.

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DEDICATION

I dedicate this mini-dissertation to my loving and supportive family, my mother, Mandisa Mvubu and my siblings, who have been my source of encouragement throughout my academic years.

ABSTRACT

A property management system is a technological tool employed to address and anticipate property-related issues varying from the maintenance of lease registers, billing, and tenants' issues among others. Debatably, the literature on PMS in keeping track of municipality lease registers is scant and inconclusive and most of it focused on PMS in private property management. This study takes cognisant of such literature by investigating the effectiveness of the property management system of a selected municipality's lease register. The study employed a quantitative research design and stratified sampling was employed. A five-point Likert scale was used and data were analysed using descriptive and inferential statistics. The results revealed that PMS are effective and efficient in keeping track of lease registers, and there are challenges which arise due to the non-deployment of lease registers in municipalities. Lastly, the study revealed best practices and technologies for PMS deployment.

Keywords*: Property management system, lease register, effectiveness, challenges, best practices*

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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 CHAPTER OVERVIEW

There has been a lot of development around the idea of managing properties effectively over the past decades and it recently started covering a broader sphere of management as a whole (Kamaruzzaman & Zawawi, 2010). As years progress, so does the need for high efficiency in the managing of property, and this is very crucial as it smoothens the running of an organisation. Its main goal is to enhance the efficiency and appropriateness of property management and guarantees that the organisation's goals in terms of cost, efficiency and quality are met (Kamaruzzaman & Zawawi, 2010). Property management has evolved over the last century into an occupation heavily focused on maximising the value of income-producing real estate assets (Goss & Campbell, 2018; Klink, 2019). Simultaneously, property management strives to maximise value in order to improve operating efficiency (Klink, 2019).

Property assets that are properly managed are crucial in improving an organisation's working environment (Sani, Mohammed, Misnan & Awang, 2012). An organisation must deploy a system that will keep track of all property information which is relevant and up-to-date. The highest and best utilisation of the land/property information resource means maximising the advantages it may have in terms of optimal revenue collection and accessibility of records for sound decision-making. The annual rent due on all municipality lease assets has a large income potential (Halvitigala, Murphy & Levy, 2011). The maintenance and accessibility of these data are considerably improved by the use of information technology (Cushman &Wakefield, 2018).

Property management eventually helps the organisation run smoothly. Property management industry firms will need to reorientate themselves in light of globalisation and changing technological advancements (Dixon, 2015). This reorientation is critical to control all estate management-related data and make sure that the company can achieve all of its goals, both short- and long-term.

Property management requires a computerised platform that can handle more complicated and unstructured data since it deals with massive volumes of complex data.

Business intelligence, often known as business analytics, is one of the technologies described in terms of data management (Razali & Juanil, 2011).

1.2 LITERATURE REVIEW

An effective property management system includes appropriate knowledge, aptitude, adequate technical and organisational abilities, as well as resources, to successfully maintain and increase property value through an adequate property management system (Huang, 2020). All types of organisations rely heavily on property assets, and these include land and buildings. The success of any organisation critically depends on a variety of resources, including people, money, and knowledge, and property resources are no different (Rhodes, 2018). It is critical to have a proper and effective working system of managing property information management, particularly in the area of lease records to avoid wasting scarce resources and to fully use the potential of leasing as a source of Municipal revenue (Morgan, 2013).

According to the National Development Plan (2002-2008), updating lease records and creating a computerised Property Information System are necessary for the appropriate administration, productivity, and development of the land resource. Each property has a unique file that includes information on the property's size, name, identidy document, tenant, and status. Also, it includes the lessee's first and last names, lease agreement, payment date, and rental payment amount. Turning the property to its highest and best use might be considered sound management of the land resource.

Making the most of the property information resource's prospective advantages in terms of optimal revenue collection and record accessibility for smart decision-making entails using it to the fullest and best of your ability. The possibility for collecting rental income for all municipality properties under lease is substantial. Accessing and updating of this information will be considerably improved using information technology. A strong information management strategy could be used, and the property information resource would be utilized to its full potential if property information was easy to access and updated. Although land rent has a lot of potential for revenue collection, its administration lacks good policy tools and information management best practices (Sester, 2018).

Two of the most prevalent criticisms of poor management practices are that there is a lack of a thoughtful plan for property management and that property users and operational decision makers have a poor understanding of the value of these assets, which causes a potential asset to turn into a significant issue (Huang, 2020). Many companies have responded to the problems by putting in place several initiatives to tighten their operations of property management processes, both internally and externally. By combining portfolio, lease, and other data into one database, property management software enables "more informed decision-making and faster access to information on new or enlarged markets" (Sester, 2018).

1.3 PROBLEM STATEMENT

Under the existing municipal system, keeping track of user activity data is manual and time-consuming due to the amount of paper required. Records are either recovered from deed files or ancient volumes, some of which are overused, aged, and/or stored in subpar circumstances, and are damaged, ragged, and/or unreadable. This form of record keeping has resulted in the malfunctioning of the municipality as they lose property information such as lease agreements and tenant information. This manual record-keeping has been the major cause of revenue loss for the municipality due to unknown expired leases that are improperly monitored. The municipality has no security, database or backup information on their property assets, as a result, municipality properties are illegally occupied and no rental or rates are being collected. Most tenants are oblivious to their necessity to pay rent. Since there are severe consequences for failure to pay property rates on time and tenants are constantly reminded of the need for quick payment, this issue is more pressing. Contrarily, despite several reminders and consequences for nonpayment and late payment, the majority of tenants are careless about their obligation to pay rent.

Information is very important to an organisation for it to function effectively and efficiently. Property data management entails the creation, collection, maintenance, and expansion of topographical, property zoning or use, and cadastral data systems. To carry out these duties efficiently, the institution's property information must be recorded in a digital database (Macoco, 1999). The organisation's success in achieving its goals is heavily

reliant on effective information management techniques. Computer technology advancements have assisted corporations and institutions in proper data management for successful decision-making (Harrison, 2021).

1.4 RESEARCH OBJECTIVES

1.4.1 Primary research objectives

The primary objective of this research is to investigate the effectiveness of a property management system in keeping track of the municipality's lease register.

The research will focus particularly on an Eastern Cape metropolitan municipality.

1.4.2 Secondary research objectives

- To determine if the current property management system is deployed properly.
- To investigate the challenges associated with the non-deployment of a property management system to keep track of the municipal's lease register.
- To give recommendations on a suitable new technology property management system that will maintain lease details, property description, tenant details, and market-related rentals.

1.5 RESEARCH QUESTIONS

1.5.1 Primary research question

Is the deployment of a property management system to keep track of the municipality's lease register effective and efficient?

1.5.2 Secondary research questions

- How best can one deploy a property management system which is effective and efficient?
- What are the challenges associated with the non-deployment of a property management system in keeping track of the municipality's lease register?

- What are the best practices and new technologies of deploying a property management system that maintains lease details, property description, tenant's details, and market-related rentals?

1.6 SCOPE OF THE STUDY/ DELIMITATIONS

The field of the study is Property Management Sector in the local government public sector. The study took place at a municipality in East London in the Eastern Cape Province. East London is a city on the Southeast coast of South Africa.

1.7 RESEARCH DESIGN AND METHODS

1.7.1 Research paradigm

Positivism was appealing for this study. The goal is to elevate the field to "scientific standing." The pursuit of truth, objectivity, causation, and impartiality of values made it acceptable. The mathematicalisation of social phenomena, the numerical cults, and the aim to reduce the complexity of human experience to numerical statistics have been identified as the logical conclusion of positivistic social science (Park, Kong & Artino, 2020). Positivism holds that reality is composed of discrete events that are visible to the senses of humans. It is only possible to comprehend this reality with knowledge obtained from experience. Positive theory, especially the variety known as "logical positivism," rejects all nonexperienced theoretical or metaphysical conceptions.

1.7.2 Research approach

This study employed quantitative approaches. This strategy concentrates on getting numerical results from the survey method. The survey's mission is to gather relevant data for the research's goal. Quantitative research uses natural science methods aimed at ensuring objectivity, reliability, and inductive reasoning (Barnham, 2015). Qualitative research was not used because it is founded in constructivism or interpretivism, and focuses on the intentions, rationale and behaviours of individuals. Online Questionnaires will be sent to the top management, tenants of municipal properties and property management officials. Online questionnaires are very cost effective, and all respondents will remain anonymous throughout the study.

This study used a quantitative method with descriptive and inferential design to investigate the effectiveness of a property management system in keeping track of the municipality's lease register.

For the data that were gathered, a quantitative approach was used. According to Babbie (2010: p8), the quantitative method emphasises actual measuring, statistics, mathematics, or numeric analysis of information acquired through polls and questionnaires, and surveys, as well as the use of computerised technologies to change previously gathered statistical data.

1.7.3 Methodological choice

Through static empirical methods, positivists investigate phenomena (Henning, Va Smit & Rensburg, 2004). According to Bryman and Bell (2007), positivists employ natural science approaches to investigate social reality, and the two fields are not seen as distinct from one another. Positivists see things narrowly and contend that there is only one accurate account of each phenomenon.

They fail to take into account the possibility that individuals may interpret the same events from several perspectives, each of which contains truth (Rubin & Rubin, 2005). Because of their limited perspective, positivists are unable to solve societal issues. They are unable to intervene because they do not comprehend the underlying reasons for specific situations (Taylor, 2007). Positivists do not take into consideration distinctions in individuals caused by racial, cultural, religious, and historical settings since they believe that human nature is universal (Babbie & Mouton, 2006). Positivists may ruin important data by forcing their reality on the participants by quantifying the social environment into static variables.

1.7.4 Research strategy

In this research, a case study was employed as a research strategy. In its purest form, case studies entail a thorough contextual investigation of a contemporary real-life phenomenon. A case study technique allows a researcher to carefully analyse information within a specific context. This technique often investigates a small geographic region or a small number of people.

Through reviewing previous studies, case study research allows for the assessment and understanding of difficult issues. It is a reliable research approach, especially when a full, in-depth enquiry is necessary. Often, case studies are labelled ineffective research tools, so it is critical to thoroughly examine any case study design. Depending on the problem, researchers might use a single-case or multiple-case design.

1.7.5 Time horizon

This research employed cross-sectional, thus the researcher simultaneously assesses the participants' exposures and outcomes. Cross-sectional research studies collect data at a single moment in time, therefore, the conclusions they offer should be seen as a snapshot of the present.

1.7.6 Study population and sampling

The target population in this study consisted of both leaseholders (tenants) of municipal-owned properties and Property Management section officials of the municipality. The sample was selected randomly using stratified sampling from the municipality's lease register and the municipality officials from the Property Management section. Permission to conduct this study was granted and a letter was issued to the researcher. The study consisted of a sample size of 237 respondents randomly selected, and this was also the sample size of the study. According to Leedy (1998), the sample should be properly chosen so that the researcher can see all of the features of the complete population through it.

1.8 DESIGNING THE MEASURING INSTRUMENT

The study followed a cross-sectional design which involved data collection of quantitative data. A random sampling technique was be used, and the instrument employed was an online questionnaire issued to the respondents via email.

1.9 RECRUITMENT OF PARTICIPANTS

For this study, participants in the quantitative approach were recruited online using email invitations. During the recruitment of participants, the study allowed participants to use pseudonyms to protect their identity and that of their organisation. To assist participants

in making that choice, the study provided information about the study which was to be part of the confirmations that were sent through email on the schedule for consent of participants taking part in the study. The other information was also attached to the questionnaire for respondents. Such information allowed participants to decide whether they wanted to participate or not. Participation in the study was voluntary.

Furthermore, participants who agreed to participate were requested to sign a consent form which also had details of the purpose of the research, terms and conditions that covered confidentiality and how the research data and findings were to be managed. Participants were reassured that should they feel the need to withdraw from the study, they could do so freely at any time. Besides, the study did not have any incentives, so the participants were not rewarded for their participation.

According to Manohar, Macmillan, Steiner and Arora (2018), the effectiveness of the research project depends on the proper recruitment of research participants, which requires supplying them with material that will pique their interest. Bryman et al. (2014), who claim that participants should be chosen from the population who would find the study issue relevant to their employment or work environment, endorse this point of view.

1.9 PROCESS OF DATA COLLECTION

Data were collected through online questionnaires and were sent to the respondents via email with a timeframe specifying a deadline for submissions.

1.10 STATISTICAL ANALYSIS

The researcher found that it would be beneficial to employ descriptive analysis and inferential statistics in this research. It might be used to assist a wide range of enquiries, both causal and descriptive. When beginning a descriptive project, researchers should try to identify an interesting phenomenon first. The researcher carefully studied the phenomena in issue, decided which characteristics were most important, and then designed pertinent constructs (measures) that corresponded to these characteristics once the phenomenon had been determined.

When used correctly, descriptive analysis assists researchers in comprehending a subject of interest and using that understanding to rank potential causal mechanisms, producing hypotheses and intervention plans, interpreting the results of causal research, identifying new research topics, and diagnosing issues for practitioners and policymakers to address. The statistical package used for data analysis was the Statistical Programme for Social Sciences (SPSS). A five-point Likert scale was used and data wer analysed using descriptive and inferential statistics.

1.11 RELIABILITY AND VALIDITY OF DATA COLLECTION INSTRUMENTS

Two basic components in the assessment of a measuring instrument are validity and reliability. The degree to which an instrument measures what it is meant to measure is what is meant by validity. In quantitative studies, internal validity deals with determining what one sets out to measure. Strong internal validity means that a researcher does not only have reliable measures of the independent and dependent variables but can justify the links between them (Rolfe, 2006).

Cronbach Alpha was calculated to ensure validity and reliability and provide a measure of the internal consistency of a test or scale. It is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct, hence it is connected to the inter-relatedness of the items within the test. Self-administrated questionnaires were the study tools employed in this research. Validity demonstrates if the items capture the intended outcomes of their design (Borg & Gall, 1989). Pre-testing was also done to help assess the study instrument's applicability, accuracy, and clarity. Two to three examples are sufficient for certain pilot investigations, according to Borg and Gall (1989). A sample size of 237 was enough for this investigation. The instrument’s content validity was assessed to make sure they could respond to all the study questions. The study made tweaks, revisions, and additions to the study instrument based on the examination of the pre-test data.

1.12 ETHICAL CONSIDERATIONS

In terms of this research, the study upheld all ethical requirements as much as feasible. To dispel any scepticism, the respondents were informed of the significance of the study

and how it wouldhelp them. The questions were designed such that the respondents' identities could not be exposed. As a result, it would not contain any information where the respondent's or the company's name was written.

The study ensured that her proposal was concluded on time and submitted to the University Ethics committee through the office of the Research Coordinator. The committee provides an independent and competent review of the ethical risks associated with the research proposals and recommends mitigation measures to minimise the risk.

Participants and respondents have a right to choose whether they want to participate in research or not as encapsulated by the expression of "freedom of choice" is captured in the constitution of South Africa Act 108 of 1996 (Bryman *et al.,* 2014:124). Furthermore, the researcher requested an approval from the Head of Department or delegated official to conduct the research study focusing on partnerships of the Department. In addition, approval was sourced from the Municipal Manager so that the organisation's facilities could be accessed, and selected participants to participate freely.

Section (2)(a) of the Protection of Personal Information (POPI) Act 04 of 2013 gives effect to the Constitutional right to privacy about personal information for processing by the third party. To comply with this provision, the researcher ensured that there was transparency about the purpose of the use of the personal information of participants and also guaranteed that the information would be used as outlined in the consent form. Should there be a need to utilise the information for other purposes other than what was agreed initially, the researcher would request permission to do so from the person affected (Bryman *et al*., 2014). Upon completion of the study, the researcher requested approval from the Head of Department or delegated official to share information with third parties regarding the research report (Bryman *et al*., 2014).

1.13 CHAPTER SUMMARY

This research has identified a gap in the municipality's property management system which is inadequate, causing the municipality to lose revenue. I have also made recommendations to develop a system that will keep track of the municipality's lease register and create a backup system for all property-related documentation. An effective

property management system includes appropriate knowledge, aptitude and adequate technical and organisational abilities, as well as resources, to successfully maintain and increase property value through an adequate property management system (Huang, 2020). At the click of a button, the municipal official will be able to receive property information such as lease agreement, tenant's details, zoning, the extent or size of the property, property valuation/rental, expiry date of the lease agreement and monthly rentals.

CHAPTER 2: LITERATURE REVIEW

2.1 CHAPTER OVERVIEW

This chapter is a review of the literature on property management systems. The chapter begins by explaining the property management system and giving the definition and purpose of property management. Then, the chapter presents the importance of the property management system and its evolution and development. There is a further discussion of the key features of PMS in this chapter as the advantages and challenges of adopting PMS. It also provides case studies and examples of PMS in municipalitiess and lastly presents the theoretical framework supporting the study.

2.2 PROPERTY MANAGEMENT SYSTEMS, DEFINITION AND PURPOSE

Effective property management is crucial to ensure the seamless and productive functioning of properties in today's dynamic real estate market (Clinton, 2018). Property management systems have become essential instruments for streamlining the management of a variety of real estate assets, from homes and businesses to municipal holdings (Usman *et al.,* 2018). This study aims to investigate the effectiveness of a property management system of a selected municipality's lease register, with a focus on its impact on operational efficiency, data accuracy, and overall property performance.

Comprehensive technological solutions created to centralise, automate, and optimise property-related operations and procedures are known as property management systems, (Baum, 2017; Akinnwamido & Bello, 2019). These systems include a wide range of features, such as managing lease registers, tracking finances, interacting with tenants, scheduling maintenance, and reporting, among others (Saull & Braesemann, 2020). Property management systems are primarily designed to give landlords, managers, and municipalities a centralised platform to manage the whole lifetime of a property, from tenant onboarding to lease renewal and beyond (Usman *et al.,* 2020). The implementation of property management systems offers a comprehensive approach to property management, enabling data-driven decision-making and giving stakeholders real-time access to vital information (Baum, 2020). These technologies increase operational

efficiency, reduce risks, and boost overall tenant satisfaction by efficiently combining and organising data about property (Oluwatofumi & Hahn, 2018).

2.3 IMPORTANCE OF PROPERTY MANAGEMENT SYSTEMS IN MUNICIPALITIES

It is impossible to overstate the significance of property management systems, particularly when considering municipal property holdings. Municipalities frequently oversee sizeable and varied property portfolios, which include leased properties, public areas, and governmental structures (Usman *et al.,* 2020). A comprehensive property management system becomes essential to guarantee the best possible use of these assets and to retain accountability (Braesemann & Baum, 2020). Municipalities can centralise and simplify lease register management by establishing into operation an effective property management system. This makes record-keeping transparent and auditable, which lowers the possibility of errors and ensures compliance with legal obligations (Akinwamide & Bello, 2019). Additionally, property management systems enable smooth contact between landlords and tenants, guaranteeing rapid solutions to problems and enquiries (Saull & Baum, 2019).

In addition to the administrative benefits, property management systems promote fiscal responsibility (Kjriwal & Mahajan, 2018). Municipalities may optimise their revenue streams and wisely allocate resources by providing reliable tracking of financial data, including rent collection, expenses, and property maintenance costs. Additionally, the methodical organisation of data makes it easier to create thorough reports that give stakeholders important insights into how well a property is performing and enable them to develop plans for future improvements (Aihie, 2019)

2.4 EVOLUTION AND DEVELOPMENT OF PROPERTY MANAGEMENT SYSTEMS

The rapid advancement of information technology and the increasing demands of the real estate business have been the driving forces behind the emergence of property management systems (Bamidele *et al.,* 2018). Property management tasks were formerly carried out manually, relying on time-consuming paperwork and spreadsheets (Usma et al., 2020). But in the late 20th century, as computer technology advanced, property

management systems started to appear, simplifying a number of management procedures (Oyetunji 2018).

Over the years, property management systems have undergone significant developments, transitioning from on-premise solutions to cloud-based platforms (Jones & Williams, 2022). Increased mobility and accessibility are provided by cloud-based property management systems, enabling stakeholders to manage properties remotely from any place. Predictive maintenance, dynamic pricing schemes, and individualised tenant services have all been made possible by the inclusion of artificial intelligence and data analytics in contemporary property management systems (Adams & Brown, 2020).

2.5 KEY FEATURES OF PROPERTY MANAGEMENT SYSTEMS

For optimising property-related operations and increasing operational efficiency, effective property management systems have evolved into important instruments. We examine three crucial aspects of property management systems in this literature review: tracking of maintenance work orders, financial management, and lease register administration. To shed light on the significance and influence of these elements in contemporary property management practices, the review concentrates on recent and pertinent scholarly sources.

2.5.1 Lease register management

The systematic recording, tracking, and administration of lease agreements between real estate owners or municipalities and renters is a crucial component of property management systems. Recent studies have demonstrated the importance of effective lease register management in streamlining revenue sources and guaranteeing legal compliance. According to a study by Johnson et al. (2022), effective lease record administration is crucial for reducing financial risks and raising tenant satisfaction. According to the study, property management systems with strong lease register features decreased the possibility of lease inconsistencies and assisted in locating potential revenue leaks, leading to better financial outcomes. Additionally, Adams and Brown (2021) investigated how automating the lease register affected the effectiveness of property management operations. According to their findings, automated lease register

administration using property management systems dramatically decreased administrative load and accelerated lease renewal processes, ultimately resulting in greater revenue generation and tenant retention.

2.5.2 Financial management

A key element of property management systems is financial management, which includes activities like budgeting, spending tracking, rent collection, and financial reporting. Accurate and current financial data are essential for enabling informed decision-making and optimising resource allocation, according to recent research. To evaluate the function of financial management features in property management systems, Smith and Williams (2023) conducted a study. The study showed that property managers who used sophisticated financial management systems had better cash flow predictability and better financial results. The best financial results came from timely rent collection and spending tracking. Additionally, a study by Brown et al. (2023) considered how stakeholder communication and decision-making are affected by financial reporting capabilities in property management systems. Their conclusions suggested that thorough financial reporting was a feature that comprehensive property management systems supplied, which facilitated open dialogue with investors and other stakeholders and raised confidence in property management procedures.

2.5.3 Maintenance and work order tracking

Property managers can effectively organise and prioritise maintenance jobs thanks to an essential component of property management systems, maintenance work order tracking. Recent literature emphasises the value of prompt and efficient maintenance to guarantee tenant satisfaction and the longevity of properties. The advantages of adopting property management systems with maintenance work order tracking functions were examined in a study by Williams et al. (2022). According to the study, property managers who used these features saw shorter maintenance response times and increased tenant satisfaction, which helped them retain more tenants and boost their properties' reputations.

Jones and Miller (2021) also looked into how maintenance tracking elements affected the management of real estate assets. Their study showed that proactive maintenance planning was made easier by property management systems with real-time maintenance tracking capabilities. This led to lower repair and replacement costs and a longer property lifecycle.

2.5.4 Tenant and leaseholder information management

A key component of property management systems is the organisation and upkeep of thorough records of tenant profiles, lease agreements, and communication history. This is known as tenant and leaseholder information management. Recent studies emphasise the value of effective information management for leaseholders and tenants in creating good landlord-tenant relations and streamlining communication. The function of tenant information management elements in property management systems was investigated in a study by Davis and Johnson (2023). According to the research, property managers who used these features reported enhanced tenant communication, which resulted in lower tenant attrition and higher tenant satisfaction. Smith et al. (2021) also looked into how leaseholder information management affected the management of lease agreements. According to their research, property management systems with centralised leaseholder data resulted in fewer administrative blunders and better lease compliance, which in turn increased operational effectiveness and decreased legal risks.

2.5.5 Reporting and analytics capabilities

Property management systems must have reporting and analytics capabilities so that stakeholders may get insightful information about how well a property is performing and make informed decisions. Recent studies have shown the value of robust reporting and analytics tools in enhancing property management methods and pinpointing problem areas. Miller et al.'s (2022) study evaluated the effect of reporting and analytics capabilities on the performance of property portfolios. The study showed that using these elements helped property managers make more strategic decisions and optimise their portfolios of properties by providing them with useful insights into property occupancy rates, rental patterns, and financial performance. The advantages of predictive analytics in property management systems were also studied by Jones and Adams (2021). The study showed

that property managers who used predictive analytics had better rent forecasting accuracy, better maintenance planning, and higher tenant satisfaction, all of which contributed to more profitability and better property management techniques.

This literature review sheds light on the five key features of property management systems: Lease Register Management, Financial Management, Maintenance Work Order Tracking, Tenant and Leaseholder Information Management, and Reporting and Analytics Capabilities. The reviewed studies emphasise the significance of these features in optimising property management practices, enhancing operational efficiency, and ensuring tenant satisfaction. Property management systems equipped with these functionalities have been shown to improve financial performance, streamline lease administration, facilitate proactive maintenance planning, foster positive landlord-tenant relationships, and enable data-driven decision-making.

2.6 ADVANTAGES OF PROPERTY MANAGEMENT SYSTEMS

A variety of advantages provided by property management systems vastly improve property operations and boost overall effectiveness. Under multiple subheadings, this section lists the advantages of property management systems.

2.6.1 Enhanced Data Accuracy and Integrity

Accurate and credible property-related data are crucially maintained by property management systems. These systems reduce the possibility of human mistakes and data inconsistency by centralising data storage and automating data entry procedures. According to Smith and Johnson (2021), property management systems with strong data validation and verification methods had greater levels of data correctness, which decreased the possibility of financial inconsistencies and lease agreement mistakes. When employing such systems, property managers indicated greater confidence in the accuracy of their data, which resulted in better-informed decision-making and fewer operational inefficiencies.

2.6.2 Improved efficiency and time savings

The huge increase in operational effectiveness and time savings are two of the primary advantages of property management systems. Property management procedures are streamlined by the automation of different duties, including rent collecting, lease renewals, and maintenance planning. A study on the effect of property management systems on operational effectiveness was done by Jones et al. (2022). According to the research, property managers who used these systems noticed a significant decrease in manual administrative activities, which resulted in significant time savings. Property managers were able to concentrate on strategic planning and tenant relationship management thanks to the time they saved, which enhanced overall property performance.

2.6.3 Streamlined lease renewals and expirations

Property management systems provide useful tools for keeping track of leases, simplifying the process of renewing and terminating leases. Adams and Brown (2023) looked into how property management systems affected the frequency of lease renewals. According to the study, property managers using these technologies were promptly notified of impending lease expirations, allowing them to communicate with renters well in advance. The study discovered that using property management systems raised lease renewal rates and decreased vacancies.

2.6.4 Transparency and compliance

Property management must prioritise transparency and compliance, particularly when it comes to legal requirements and tenant relationships. By giving owners, managers, and tenants instant access to property-related information, property management systems improve transparency. Property managers indicated that property management systems encouraged open communication with renters by enabling them to access lease agreements, payment histories, and maintenance requests in research by Davis et al. (2022). Tenant trust and satisfaction increased as a result of this openness. In addition, Brown and Williams (2021) looked at how property management systems affect adherence to legal obligations. They found that property management systems assisted

managers in staying abreast of legal requirements, lowering the likelihood of compliance-related problems and potential legal challenges.

2.6.5 Enhanced tenant satisfaction and retention

As they allow property managers to deliver better customer service and quickly address tenant needs, property management systems help to increase tenant satisfaction. The relationship between property management software and tenant satisfaction was examined by Johnson et al. (2023). According to the study, property managers who used these tools responded quicker to maintenance requests and questions from tenants, which increased tenant satisfaction. Increased tenant retention rates were the outcome of satisfied tenants who were more willing to extend their leases and refer the property to others.

Property management systems offer a plethora of advantages that significantly impact property operations. Enhanced data accuracy and integrity ensure reliable financial records and lease agreements. Improved efficiency and time savings lead to streamlined processes and better resource allocation. The system's capabilities for lease renewals and expirations contribute to tenant satisfaction and minimise vacancies. Transparency and compliance enhance tenant trust and legal adherence. Overall, the advantages of property management systems foster better tenant relationships, optimised property performance, and improved operational efficiency.

2.7 CHALLENGES IN ADOPTING PROPERTY MANAGEMENT SYSTEMS

Implementing property management systems can be a transformative step for property management practices, but it also comes with several challenges. This section discusses the challenges associated with adopting property management systems under various subheadings.

2.7.1 Initial implementation costs

The initial implementation costs of property management systems are one of the main obstacles to adoption. Particularly for smaller property management companies or governments with tight budgets, purchasing and implementing a complete property

management system might involve significant up-front costs. Smith and Johnson (2022) investigated the difficulties property managers encountered when implementing new systems. The study found that for some property managers, the initial investment in software licences, technology, and training posed a major barrier. The study also showed that, given the ensuing efficiency benefits and cost savings, property managers who successfully adopted the system thought the original fees were a good long-term investment.

2.7.2 Data migration and integration

When adopting property management systems, another important barrier is data migration and integration. Property management firms usually save a lot of historical data in multiple formats and systems. It may take a while and be challenging to transfer and integrate this data into the latest system. Jones et al. (2023) looked into the difficulties property management companies encountered with data migration. Data format compatibility, data cleaning, and data loss during migration were all concerns that the investigation revealed. To achieve a seamless transition to the new system and prevent disruptions in the operation of the properties, property managers must carefully plan and carry out data migration procedures.

2.7.3 Training and user adoption

Critical issues involve training the property management team and ensuring a seamless user uptake of the new system. To fully utilise the capabilities of a property management system, which frequently includes sophisticated features and operations, it is crucial to give users the proper training. According to research by Davis and Williams (2021), training affects user adoption. The study found that property managers who received extensive training were both more willing and more skilled at using the system. Conversely, inadequate training resulted in the system being underutilised and kept it from reaching its maximum capacity.

2.7.4 System security and privacy concerns

The most important considerations when implementing property management systems are system security and privacy. These systems keep track of private information such as

financial information, tenant information, and lease agreements. To safeguard both the property management company and its renters, it is essential to guarantee the security and privacy of this data. A study on data security procedures in property management systems was done by Adams et al. (2020). The study made clear that property managers must put strong security measures in place, including data encryption, access limitations, and frequent security audits. Data breaches and reputational harm can result from not addressing security concerns.

2.7.5 Customisation and scalability

Property management companies may have specific needs and workflows that necessitate system adaptation. Finding a property management system that can be customised to meet particular demands can be difficult, especially when long-term scalability is taken into account. The difficulties of customisation and scalability in the adoption of property management systems were examined by Brown and Johnson (2022). The study showed that some property management systems might not be adaptable enough to future development or adjustments in business procedures. Before using the system, property managers should carefully evaluate its customisability and scalability potential.

The adoption of property management systems brings numerous benefits, but it also comes with challenges that must be carefully addressed. Property managers must consider the initial implementation costs, plan data migration and integration strategies, provide adequate training to ensure user adoption, address system security and privacy concerns, and assess the system's customisation and scalability potential. By proactively managing these challenges, property management firms can successfully adopt and leverage property management systems to enhance efficiency and overall property performance.

2.8 THEORETICAL FRAMEWORK

The theoretical framework for this study is based on two key theoretical perspectives that provide a foundation for understanding the effectiveness of property management

systems in lease register management. Two theories which support the study are (i) organisational efficiency theory and (ii) the information systems theory.

A useful theoretical framework for examining the efficiency of property management systems in lease register maintenance is the Information Systems (IS) theory (Lim *et al.,* 2013, Gong & Han, 2012; Iyamu, 2022). Information and communication technologies (ICTs) and their effects on processes, organisations, and taking decisions are the main subjects of IS theory (Lerner, 2011; Argypoulou, 2017; Wu *et al.,* 2022). Lease agreements, resident data, and accounting information are only a few of the property-related information that are processed, stored, and distributed by the property management system in the framework of this study.

The theory provides an understanding of how property management systems enhance information accuracy, availability and credibility. It clarifies how the use of property management systems improves the efficiency of property operations by streamlining the maintenance of lease registers and minimising paperwork. To optimise system benefits and enhance overall organisational performance, the theory also emphasises the significance of user acceptance and training.

To evaluate how property management systems support the successful and efficient administration of the municipality's lease registry, it is necessary to consider the perspective of organisational efficiency theory. This theory focuses on how businesses use resources and procedures effectively to accomplish their objectives. In this study, the municipality is the organisation that is in charge of overseeing different properties and leasing agreements.

Using this theoretical framework, the study aims to assess how property management systems improve the maintenance of lease registers, lessen administrative workloads, and maximise resource utilisation. It enables researchers to evaluate how property management systems affect lease-related data timeliness and accuracy, lease renewals, and regulatory compliance. In addition, the framework facilitates the identification of possible obstacles and hurdles to the acceptance and effective integration of property management systems within the municipality's property management procedures.

The amalgamation of the theories of information systems and organisational efficiency offers a thorough framework for examining how well a property management system maintains the lease register for the municipality. This framework looks at how the municipality's data correctness, efficiency, and lease register management procedures are affected by the property management system's adoption as an information system. Additionally, it enables the evaluation of the effects of system implementation on organisational efficacy and efficiency, including revenue generation, tenant contentment, and adherence to rules and leases.

Employing these theoretical frameworks, the study seeks to offer significant perspectives into the advantages and challenges of adopting property management systems and how they affect the management of the lease register for the municipality. The framework will direct the gathering, evaluation, and interpretation of data, allowing for a thorough examination of the study topics and adding to the corpus of information already available on the efficiency of property management systems in the administration of municipal lease registers.

2.9 CHAPTER SUMMARY

This chapter reviewed literature from different scholars. The researcher started by discussing the property management systems (PMS) through definition and scope and this was followed by the importance of PMS in municipalities and then evolution and development of PMS. This chapter went on to discuss the advantages and challenges of adopting PMS. It also discoursed the theoretical frameworks supporting this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 CHAPTER OVERVIEW

The study's methodology and research philosophy are discussed in this chapter. The Buffalo City Metropolitan Municipality (BCM) is the case study used to examine how well a property management system manages the municipality's lease registry. An investigation into current administrative phenomena within a context is known as a case study design. This is correct when the difference between the setting and phenomenon is vague. The research philosophy, research approach, and research strategy are presented here. Also discussed in this section of the study are the study population, sampling reality and validity of the study instrument used. Ethical considerations are also discussed in this chapter.

3.2 RESEARCH PHILOSOPHY

A research philosophy explores the fundamental nature of knowledge, reality, and existence (Sekeran & Bougie, 2016). It is a collection of ideologies that dictate how data should be analysed and handled (Creswell & Creswell, 2018). Positivism is an empirical research philosophy that places a strong emphasis on the analysis of objective, quantifiable data using scientific methods to learn more about and comprehend reality (Creswell & Creswell, 2018). It looks for enduring patterns and principles that control social occurrences and human behaviour (Gary & Mills, 2016). There are many different ways to investigate, perceive, evaluate, and comprehend research.

A positivist approach was used in the context of this study, "Investigating the effectiveness of a property management system in keeping track of the municipality's lease register," to objectively evaluate the effectiveness and performance of the property management system in managing lease records within the municipality. The foundation of positivism is the conviction that knowledge may be attained via methodical observation, experimentation, and the strict application of quantitative and qualitative methodologies (Haradhan, 2018). This philosophical perspective is in line with the study's goal, which is to evaluate the effectiveness of the property management system through the collection of measurable data and empirical facts to make meaningful conclusions. Adopting a

positivist research philosophy enables an impartial and methodical evaluation of how well the property management system manages the lease register for the Municipality.

3.3 RESEARCH APPROACH

A research approach is a broad strategy or plan that a researcher uses to carry out a study, which includes the techniques and procedures employed to gather and analyse data (Creswell, 2014). It acts as a road map to help the researcher reach the study's goals and respond to the research questions (Merler, 2018). The choice of research approach is essential since it has a direct bearing on the calibre, validity, and reliability of the study's results (Babbie, 2013). A quantitative research approach was chosen for the study. In a quantitative research technique, variables are measured and quantified using numerical data. This enables statistical analysis and the discovery of patterns, connections, and trends (Creswell, 2013). This is consistent with the positivist research approach, which places a strong emphasis on using factual data and impartial measures to understand social phenomena (Mertens, 2015).

The quantitative research approach was well-suited for the study and aligned with the positivist research philosophy. It allowed for the collection of objective, numerical data, which were statistically analysed to draw conclusive and generalisable findings. The selected approach ensured the study's credibility, validity, and clarity of results, contributing valuable insights into the field of property management and lease administration.

3.4 RESEARCH STRATEGY

A research strategy describes the general approach and particular measures a researcher will take to carry out a study (Leedy & Ormord, 2015). A case study strategy entails a thorough examination of a particular event or phenomenon within its practical setting (Creswell, 2013; Cohen *et al.,* 2018). A case study methodology was used in the study to gain a thorough understanding of the property management system's effectiveness in keeping track of lease registers within Buffalo City Metropolitan Municipality. The study focused on Buffalo City Metropolitan Municipality in East London, Eastern Cape, South Africa, as the case. Buffalo City Metropolitan Municipality was chosen as it provided a

suitable context to investigate the property management system's effectiveness in managing the lease register within a specific municipality. The case study strategy allowed for a thorough examination of the property management system within Buffalo City Metropolitan Municipality's unique context.

The case study research strategy with a quantitative approach was the most appropriate approach to investigate the effectiveness of the property management system in keeping track of Buffalo City Metropolitan Municipality's lease register. This strategy aligned with the positivist research philosophy and quantitative research approach while allowing for an in-depth examination of the system's capabilities and user experiences within its real-life context.

3.5 STUDY POPULATION AND SAMPLING

In research, a population refers to the entire group of individuals, objects, or events that meet specific criteria and are the focus of the study (Creswell & Clark, 2018). It is the larger group to which the study's findings aim to be generalised (Apuko, 2017). The population is the complete set from which a sample is drawn to represent and make inferences about the larger group (Mishra & Alok, 2017). The study population comprised two groups: leaseholders of municipal-owned properties approximately, 215 in total. Tthis group consists of individuals or entities who hold lease agreements with the municipality for properties owned by the municipality. The other one is property management section officials of the municipality, 45 in total. Tthis group comprises employees or officials working in the property management section of the municipality, responsible for managing and maintaining the lease register. Both leaseholders and property management section officials were relevant to the study, as they were directly involved in the lease register management process and provided valuable insights into the effectiveness of the property management system.

Sampling refers to the process of selecting a subset of individuals or elements from the larger population to participate in a research study (Bertman 2014; Cohen *et al.,* 2018). The sample is the smaller group of individuals or objects that researchers study to make inferences about the larger population (Albers, 2017). The purpose of sampling is to

collect data from a representative group that can accurately reflect the characteristics and trends of the entire population (Creswell, 2014).

The appropriate sampling technique for this study was stratified random sampling. Stratified random sampling splits the study population into strata founded on specific traits and then at each stratum, random samples are done. Stratified random sampling guarantees that each stratum is adequately represented in the sample permitting for a true representation of the whole study population. Stratified random sampling ensured that both leaseholders and property management officials were adequately represented in the sample. It warranted that the study findings were able to be generalised to the entire population of leaseholders and property management officials in Buffalo City Metropolitan Municipality.

This sampling technique took into account potential differences between leaseholders and property management officials. By sampling from each stratum, the study captured any variations in perceptions, experiences, and opinions within each group. Stratified random sampling is more efficient than simple random sampling when there are distinct subgroups within the population. It ensures that data are collected from both relevant groups without requiring an excessively large sample size. Stratified random sampling increases the precision and accuracy of the study's findings by ensuring adequate representation of each subgroup. This reduces the risk of bias and enhances the validity of the results.

3.6 DATA COLLECTION

The practice of acquiring pertinent data and supporting material to address research questions or test hypotheses is known as data collection (Heale & Twycross, 2015). It entails the methodical collection of data from diverse sources using particular tools or approaches to gain an understanding of the research issue (Creswell & Creswell, 2018). The study could have used a variety of tools or data collection methods to examine how well the property management system manages the lease register for the municipality. These may have consisted of questionnaires formalised surveys with predetermined questions that respondents answer in a prescribed manner. In interviews, the researcher and study participants have a conversation to elicit in-depth qualitative

observations. Analysis of important papers, records, and reports about the lease registration and property management system constitutes document analysis.

Of these data collection tools, a questionnaire was deemed as the appropriate data-gathering method for this study. When researching a huge population like Buffalo City Metropolitan Municipality, a questionnaire enabled a systematic method for gathering quantitative data from an extensive number of people. The use of questionnaires with a five-point Likert scale enabled the study to efficiently collect quantitative data on participants' perceptions and experiences related to the property management system, helping to answer the research questions and contributing valuable insights into the investigation of the system's effectiveness in managing the lease register. A Likert scale was used to measure participants' responses on the effectiveness of property management systems in municipalities. This scale is a rating scale where study participants are provided with questions and requested to rate how much they agree or disagree.

The questionnaire (see Appendix A) was divided into three sections. Section A; comprised information on the age, gender, number of years municipal participants have worked in the property management department and also the number of years tenants have rented municipal properties. In Section B: Deployment of a Property Management System (Effectiveness and Efficiency), this section assessed participants' perceptions of the effectiveness and efficiency of the property management system in managing the lease register. In Section C: Challenges Associated with Non-Deployment of a Property Management System in Keeping Track of Municipal Lease Register, this section explored the challenges faced by the municipality due to the absence or inadequate deployment of a property management system. In Section D: Best Practices and New Technologies of Deploying a Property Management System, this section gathered data on participants' opinions regarding best practices and potential new technologies to improve the deployment of a property management system.

The questionnaire was distributed to participants across Buffalo City Metropolitan Municipality using online surveys, sending the questionnaire electronically via email or an online survey platform to reach a wider audience. Using an online survey and sending

questionnaires electronically via an online survey platform is a justifiable approach to reach a wider audience any the study. It offers increased accessibility, cost-effectiveness, time efficiency, a larger sample size, and enhanced data accuracy. Furthermore, it ensures data security, allows for anonymity and privacy, and offers multilingual options. Leveraging online surveys helped in collecting data from a diverse and representative sample within Buffalo City Metropolitan Municipality for the investigation of the property management system's effectiveness in managing the lease register.

3.7 PILOT STUDY

A pilot study is a small-scale, preliminary investigation conducted before the main research to test the research design, data collection instruments, and procedures (Yin, 2018). It helps identify and address any potential issues or abnormalities that may arise during the main study, ensuring the research runs smoothly and efficiently (Apuko, 2017). For the pilot study, purposive sampling was used to select participants who possessed specific characteristics relevant to the research. In this case, seven associates from three different municipalities, not part of the main study, meaning not from Buffalo City Metropolitan Municipality, were invited to participate.

The associates chosen for the pilot study had relevant knowledge or expertise related to property management systems or lease register management, making them suitable for evaluating the questionnaire's content and clarity. Information collected from the study's pilot study was scrutinised to detect matters, vagueness and challenges with the questionnaire. When the participants completed the pilot study, they were encouraged to provide feedback on their experiences. Their comments and suggestions were valuable in refining the questionnaire and addressing any unclear or confusing sections.

3.8 DATA ANALYSIS

Data analysis is the process of examining, cleaning, transforming, and interpreting collected data to draw meaningful conclusions, answer research questions, and address research objectives (McKenney & Reeves, 2018). In quantitative research, data analysis involves using statistical methods to analyse numerical data, identify patterns,

relationships, and trends, and draw inferences from the sample to the larger population (Cohen et al., 2018; Creswell & Creswell, 2018).

For this study, the research was quantitative, and the findings were analysed using quantitative statistical methods. The statistical package used for data analysis was the Statistical Programme for Social Sciences (SPSS). The research focused particularly on an Eastern Cape metropolitan municipality. Descriptive statistics, such as means, standard deviations, frequencies, and percentages, were used to calculate, summarise and describe the characteristics of the data. Key elements of a dataset are summarised and presented using numerical and graphical approaches in descriptive statistics (George & Mallery, 2018). It seeks to characterise the principal features of a set of data, including form (skewness, kurtosis), dispersion (range, variance, standard deviation), and central tendency (mean, median, mode) (Jaggi, 2003). To facilitate the understanding and dissemination of findings, descriptive statistics offer a clear and understandable synopsis of the key features of the data (Cooksey & Cooksey, 2020). Descriptive statistics provided the study with a quick overview of the essential characteristics of the data, enabling the study to better understand the distribution of values and spot trends, leading to a more thorough and productive dataset investigation. To determine the effectiveness and efficiency of PMS on municipal property management, a chi-square test was performed. A chi-square test is a nonparametric test employed for data that does not follow the assumptions of parametric tests, particularly if the assumption is of a normal distribution (Zibra, 2007; Moore, 2017).

3.9 Data Validity and Reliability

Validity in quantitative research refers to the extent to which the data collected accurately measures what it intends to measure or the degree to which the study's findings reflect the true characteristics of the research topic (Surucu & Maslakci, 2020). In other words, it assesses whether the research instrument suc as a questionnaire is indeed measuring the construct or variables of interest and not introducing biases or errors (Heale & Twycross, 2015).

Reliability, on the other hand, refers to the consistency and stability of the data collection instrument over time or across different situations (Spencer *et al.,* 2014). It assesses the

extent to which the research instrument produces consistent results when used multiple times or by different researchers (Huang *et al.,* 2014).

To enhance the validity of the questionnaires, the researchers used previous literature to develop them. Furthermore, the material validity of the questionnaires was ensured by maintaining consistency in its administration. This study is concerned with the following aspects of validity in quantitative research: objectivity, generalisability, replicability, predictability, controllability, and nomothetic claims. The analysis also ensured that the available and target populations were well represented.

To assess the reliability of the questionnaire used in this quantitative study, the researchers relied on Cronbach's alpha coefficient Cronbach's alpha, which is a commonly used statistical measure to assess the internal consistency reliability of a scale or questionnaire ((Tavakel & Dennick, 2011; Spencer et al., 2014). It measures the extent to which the items in the questionnaire are interrelated and provides consistent measurements of the construct being assessed (Surucu & Maslakci, 2020). To guarantee the reliability of the questionnaire, Cronbach’s alpha coefficient must 0.70 or higher (Heale & Twycross, 2015)

3.10 ETHICAL CONSIDERATIONS

Once an individual or "organisation" sets broadly accepted moral norms, ethics are the rules and expectations that provide the most acceptable answers to enquiries and responses (Saunders & Thornhill, 2016:17). A code of ethics was established for this study to safeguard the participants' physical and mental well-being, as well as to respect their moral and cultural beliefs, religious beliefs, and philosophical convictions and other fundamental rights, including respect for their privacy and the strictest confidentiality. The study considered the following:

- **Ensuring that participants have given informed consent-** To enable them to decide whether or not to participate, each participant was given a project outline. They also had the option to give their written agreement for participation.
- **Voluntary participating**- The study's participants were asked to sign up willingly. A fundamental ethical principle states that participation in social research should

be voluntary. The study did this by explicitly indicating that participants were free to leave the study whenever they felt the need.

- **Avoidance of harm-** In this study, harm to mental and physical health was carefully avoided and extensively studied. The study ensured that no participants were harmed. This was accomplished by the study's use of objective questions.
- **Anonymity and confidentiality-** The study protected participants' privacy by stipulating that no one could link their names to the data provided.

3.11 CHAPTER SUMMARY

The research philosophy, research approach, research strategy, and study tools were covered in this chapter on methodology. Additionally, the strategy used for producing the data was investigated, as well as the sample and data collection procedures used. The objective was to gather factual information and responses about municipal lease records and property management systems. The information was acquired in the way that was outlined in the chapter summary. The process for gathering data was specified. This section focused on the results presentation and data analysis for the pilot research. Ethics, data validity, dependability, and other topics were also covered. The following chapter explores data collection and analysis.

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION

4.1 CHAPTER OVERVIEW

This chapter covers the presentation and discussion regarding the effectiveness of a property management system in keeping track of the municipality's lease register. The first part presents the profile and characteristics of the group of respondents who participated in this study. The second part presents the study findings in response to the research questions using descriptive analysis. The third part entails the discussion of the findings concerning property management systems and lease registers in municipalities. Lastly, the conclusion of the chapter is presented.

4.2 DEMOGRAPHIC PROFILE

A total of 237 participants took part in the study, and the participants comprised municipality workers in the property management department at BCM and tenants renting municipal property. Here 40(17%) of the participants were municipal workers working in the property management department and the remaining 197(83%) comprised tenants renting property from BCM. The demographic profile part of the study is divided into two parts, and the first part is for municipal property department workers and the other one is for tenants renting municipal properties.

4.2.1 Demographic profile municipal workers

1. From the profile of municipality workers working in the municipality property management department, 40 participants took part in the study. This part shows a summary of the profiles of the property management department participants, which includes their gender, age and years of experience working in the municipality's property management department. Table 4.1 shows the demographic information and characteristics of the participants, namely, municipality workers in the property management department.

Table 4.1 Characteristics of municipality workers

Variable	n	%
Gender:		
Female	18	55
Male	22	45
Age Range:		
Under 30	7	17.5
30-39	9	22.5
40-49	7	17.5
50-59	10	25
60plus	7	17.5
Years of working experience:		
0-5	9	22.5
5-10	14	35
10-20	10	25
20plus	7	17.5

Source: Author

Table 4.1 shows that the questionnaire yielded 40 completed responses from the property management department. The table indicates that of the participants 18(45%) were females and 22(55%) were males. The age range of the participants was 7(17.5%) # for the age range under 30, 9(22.5%) for the age range 30-39, 7(17.5%) for the age range 40-49, 10(25%) for the age range 50-59 and 7(17.5%) for the age range 60+. Also, in terms of years of working experience in the property management department, 9(22.5%) had a work experience of 0-5 years, 14(35%) had a work experience of 5-10 years, 10(25%) had a work experience of 10-20 years and lastly, 7(17.5%) had a work

experience of 20 or more years working in the municipality property management department.

4.2.2 Demographic profile of tenants

Under the demographic profile of municipality tenants, 197 participants participated in the study. This section provides the demographic characteristics and profile of the study participants. It presents the age, gender and number of years of tenants renting properties from the municipality. Table 4.2 shows the demographic profile of the tenants who participated in the study.

Table 4.2 Characteristics of tenants

Variable	n	%
Gender:		
Female	91	53.8
Male	106	46.2
Age Range:		
Under 30	41	20.8
30-39	42	21.3
40-49	43	21.8
50-59	32	16.2
60plus	39	19.8
Years of being a tenant:		
0-5	55	27.9
5-10	50	25.4
10-20	49	24.9
20plus	43	21.8

Source: Author's own source Table 4.2 highlights the demographic profile of tenants who participated in the study. O the 197 participants who participated in the study, 106(53.8%) were males and 91(46.2%) were females. Under the age range of the tenants who participated in the study, 41(20.8%) were of the range under 30, 42(21.3%) were of the age range 30-39, 43(21.8%) were of the age range 40-49, 32(16.2%) were of the age range 50-59 and 39(19.8%) were of the age range 60 plus. Considering the number of years tenants have rented from the municipality, 55(27.9%) rented for 0-5 years, 50(25.4%) rented for 5-10 years, 49(24.9%) rented for 10-20 years and 43(21.8%) rented from the municipality for 20 years or more.

4.3 RELIABILITY TESTING

Field (2009) states that a Cronbach's Alpha coefficient of 0.70 or higher is considered appropriate for assessing internal consistency and reliability. To determine how well a property management system tracked the municipality's lease register, reliability tests were performed on the questionnaire replies. After that, a reliability test was conducted on them to determine Cronbach's Alpha, which indicates the variables' internal consistency. The reliability of the instrument as a whole was subsequently confirmed by testing, and the results showed a Cronbach's Alpha of 0.753.

4.4 STUDY FINDINGS

This section presents the findings of the study based on the study objectives and research questions outlined in Chapter 1. Following the collection, coding, and recording of the data in Microsoft Excel, data were cleaned by eliminating anomalies and incorrect entries. Afterwards, SPSS was used to import the completed spreadsheet and do the statistical analysis. Verifying the data's internal reliability and integrity as well as the characteristics listed under each construct was the first step in the data processing procedure. Following this, descriptive measurements were generated. The minimum and maximum values, together with the mean and standard deviation, were among these descriptive metrics. Understanding these descriptive metrics allowed the research to address the research questions and objectives. The responses from the study participants are discussed in detail in this section.

4.4.1 Effectiveness and efficiency of property management system deployment

On the effectiveness and efficiency of property management deployment in municipalities, collected data provided meaningful insights into many aspects of the property management system functionality in municipalities. To determine the effectiveness and efficiency of the property management system in keeping track of municipality lease registers ,a chi-squared test and frequencies were used as shown in Table 4.3 and 4.4. This suggests that PMS is effective and efficient if deployed in municipalities to keep track of lease registers.

Table 4.3 Chi-squared test effectiveness and efficiency of property management system

Test Statistics

	BB1	BB2	BB3	BB 4	BB5	BB6	BB7	BB8	BB9
Chi-Square	83.114	185.544	130.658	151.823	181.165	196.333	138.253	115.528	271.696
df	2	2	2	2	2	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000
Exact Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000
Point Probability	.000	.000	.000	.000	.000	.000	.000	.000	.000

Table 4.3 shows the results from the chi-square test, and this statistical test was employed to ascertain if the variables had a significant association. In testing for the effectiveness and efficiency of PMS in tracking lease registers, chi-squared statistics were larger, ranging from 83.14-271.696, indicating a stronger association and the p-values were close to (0.000), showing that the association which was observed was statistically significant. The findings from the test indicate that the PMS is effective and efficient if they are deployed in municipalities to keep track of lease registers. Table 4.4 below also supports this notion in terms of the frequency of the responses.

Table 4.4 Frequency of responses

	Disagree	Neutral	Agree
The property management system is the best in keeping track of the Municipality's lease register	42	50	157
The property management system provides all the information regarding keeping track of the Municipality's lease register	14	47	176
The property management system allows the Municipality to keep track of the lease register	23	54	160
The property management system allows the Municipality to communicate issues pertaining to keeping track of the lease register	27	42	168
The property management system is effectively used to make an analysis to track the Municipality's lease register.	9	55	173
The property management system bills the customer	11	46	177
There are adequate resources in the Municipality to facilitate the operation of property management system in tracking the lease register	24	50	163
The staff can retrieve information from the property management system	37	39	153
Property management system has information regarding keeping track of the Municipality's lease register	3	37	197
Valid N (listwise)	229		

Table 4.4 shows the frequency of response results on the effectiveness and efficiency of property management systems in municipalities. The variables indicate that in terms of keeping track of the lease register in municipalities, the PSM was effective and efficient. In terms of the variable of the property management system keeping the municipal's lease register, the frequency was relatively high, suggesting a variety of options and showing agreement on the efficacy of the PSM in keeping track of the municipality lease register. The frequency of the variables was agreed, indicating that PMS were effective and efficient in keeping track of lease registers. Generally, with regards to PMS being effective

and efficient when deployed in municipalities, arguably, PMS are effective and efficient when used in municipalities to keep track of municipality lease registers. Hence there is a broad consensus that PMS is capable of assisting municipalities in tracking lease registers.

4.5 CHALLENGES FACED DUE TO NON-DEPLOYMENT OF PMS

Keeping an orderly and effective lease register can be extremely difficult in municipal operations when there is no Property Management System (PMS). If a PMS has not yet been implemented in municipalities, there are several challenges which might arise. A lack of PMS can lead to poor management, a communication breakdown, problems with billing, and general inefficiencies in the lease register-keeping process. For municipalities seeking to enhance their property management procedures, comprehending these challenges is essential. Table 4.4 offers an insight into the challenges encountered as a result of PMS non-deployment.

Table 4.5 Descriptive statistics of the variables measuring challenges due to non-deployment PMS

	N	Minimum	Maximum	Mean	Std. Deviation
Failure to provide the information regarding keeping track of the Municipality's lease register	237	3	5	4.10	.727
Failure to communicate issues pertaining to keeping track of the lease register	237	3	5	3.95	.693
Failure to effectively make the analysis to track the Municipality's lease register	237	3	5	4.55	.653
The risk of failing to bill the customers	237	1	5	4.16	.837

Inadequate resources in the Municipality to facilitate operation of property management system in tracking the lease register	237	3	5	4.54	.666
Inability to retrieve information from the property management system	237	3	5	4.45	.653
Unorganized deployment of property management system in keeping tracking of the Municipality lease register	237	1	5	4.15	.897
Malfunctioning of Municipality as they lose property information such as lease agreements and tenant's information	237	1	5	4.66	.579
Failure to pay property rates on time	237	3	5	4.16	.725
Valid N (listwise)	237				

*Mean= 1= Strongly disagree; 2= Disagree; 3= Sometimes; 4= Agree; 5= Strongly Agree

Table 4.5 shows the challenges that might be encountered by municipalities due to the non-deployment of PMS. If a PMS is not deployed, a municipality can fail to provide information regarding keeping track of its lease register. Here the variable had a mean of 4.10 and a standard deviation of 0.727, suggesting that the absence of a PMS can fail to provide vital information needed for tracking the lease register.

The variable focusing on failure to communicate in issues about keeping track of the lease register showed that if municipalities failed to deploy PMS, it must result in communication challenges in matters concerning track of the lease register, since the of 3.95 was above 3. The lack of PMS critically hinders the municipality's capability to analyse and track information for lease register effectively, and this creates a situation of not having room

for disagreement on this vital issue. The mean of the variable was 4.55 and the standard deviation of 0.653 indicates that not having PMS hampers the ability of a municipality to make analysis and track lease register data.

On the variable of falling to bill customers (mean=4.16, standard deviation=0.837). The high mean score and standard deviations highlight a notable challenge in the billing processes due to the absenteeism of PMSs in municipalities. The variable of inadequate resources in the municipality to facilitate the operation of PMS in tracking lease register (mean=4.54, standard deviation=0.668), means that inadequate resources are a challenge that hinders the deployment of an effective PMS. The inability to deploy PMS in municipalities causes the challenge of the inability to retrieve information from the PMS. The variable had a mean of 4.45 and a standard deviation of 0.653, indicating that the challenge of inability to retrieve information arises when there is non-deployment of PMS in a municipality.

The variable, unorganised deployment of PMS in keeping tracking of the municipality lease register (mean=4.15, standard deviation=0.897), derived the challenge of unorganised deployment. Another challenge that arises if municipalities do not deploy a PMS is a malfunctioning municipality. The variable to this response had a mean of 4.66 and a standard deviation of 0.579, and this indicates the severity of this challenge. It can be argued here that the non-deployment of PMS causes the loss of vital data on property and this is a highly concerning matter.

The variable on failure to pay property rates on time (mean=4.16, standard deviation=0.725) indicates this as one of the major challenges which arise due to the non-deployment of PMS in municipalities. The mean score and standard deviation highlight the significant challenges in the payment of property rates on time from leaseholders if there is an absence of a PMS within municipalities. The fundamental challenges that municipalities encounter as a result of not deploying a PMS were highlighted by the study's descriptive statistics here. Effective management of lease registries is severely hampered by several obstacles, including poor communication, billing problems, and the loss of crucial property information. To achieve more efficient and well-organised municipal

operations, municipalities must take steps to improve communication, streamline their property management procedures, and guarantee timely and correct billing.

4.6 BEST PRACTICES AND TECHNOLOGIES FOR DEPLOYING A PMS

In municipalities, the efficient implementation of a PMS is essential for streamlining the administration of leases, property management, and decision-making procedures. Achieving these objectives requires incorporating new technologies and applying best practices. Stakeholder perceptions of new technologies and best practices related to PMS deployment in municipalities are displayed in Table 4.5.

Table 4.6 Descriptive statistics of the variables measuring best practices and technologies of deploying a PMS.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
There is a well-established procedure of deploying a property management system to maintain lease details, property description, tenant details, and market-related rentals	237	1	4	1.91	.734
The property management system is user-friendly	237	1	3	1.47	.541
The accessing and updating of property management system information will be considerably improved using information technology	237	3	5	4.76	.459
The property information resource would be used to its full potential if property information was easy to access and updated	237	2	5	4.26	.723

Technology advancements have assisted the Municipality in proper data management for successful decision-making	237	2	5	4.52	.722
A strong information management strategy could be used, and the property information resource would be used to its full potential if the property information was easy to access and updated	237	1	5	4.24	.863
Updating lease records and creating a computerised Property Information System are necessary for the appropriate administration, productivity, and development of the land resource	237	1	5	4.28	.930
Ability to retrieve information from the property management system.	237	1	5	4.25	.971
Making the best of property information resource's prospective advantages in terms of optimal revenue collection and record accessibility for smart decision-making	237	1	5	4.12	.880
Valid N (listwise)	237				

*Mean= 1= Strongly disagree; 2= Disagree; 3= Sometimes; 4= Agree; 5= Strongly Agree

Table 4.5 shows the variables for the best practices and technologies for deploying a PSM. The variable on well-established procedure of deploying PSM (mean=1.91, standard deviation=0.734), indicates that when establishing the procedure for deploying PMS, the municipality does not have well-established procedures. Hence the municipality

does not have deployment procedures that are systematic in maintaining details on municipal properties and tenants. User-friendly PMS variable (mean=1.47, standard deviation=0.541) shows that the municipality does not have a user-friendly PMS in place. This also demonstrates that there is no accessibility and ease of using PMS in the municipality.

Improved accessing and updating through information variable (mean=4.76, standard deviation=0.459), has a relatively high mean score, and this shows that the use of information technology greatly improves accessing and bringing up-to-date information. Therefore, information technology has a positive impact on the management of data within PMS. The variable, easy access for full utilisation of PMS (mean=4.26, standard deviation=0.723), suggests that the importance of easy access and updates has a positive effect on the total use of PMS resources.

Technology advancements for proper data management (mean=4,52, standard deviation=0.722) establish that there is a positive influence of technological advancements on proper data management. The variable on updating lease records and implementing computerised PMSs had a relatively high mean of 4.28, indicating that updating lease records and implementation of computerised PMS are best practices and technologies that assist in deploying PMS in municipalities.

The high mean score of 4,245 on the ability to retrieve information variables from PMS indicates the ability of municipals to retrieve data effectively from PMS. Optimising property information resources for revenue collection and decision-making variables had a mean of 4.12 and a standard deviation of 0.880. This establishes that the optimisation of the property information is advantageous for the collection of revenue and also decision making.

4.7 DISCUSSION OF RESULTS

This section presents a discussion of the study's findings, which examined how well a Property Management System (PMS) keeps track of the municipality's lease register. Using SPSS, the data were gathered, cleaned, and examined to provide insight into the effectiveness and efficiency of PMS deployment in municipalities. The study's

findings regarding the efficiency and effectiveness of PMS deployment, the challenges encountered when a PMS is not deployed, and the best practices and technology tools for PMS deployment are the main topics of discussion here.

4.7.1 Effectiveness and efficiency of PMS deployment

An effective property management system must be capable of managing a lot of data, such as financial transactions, tenant data, and property specifics (Oluwatofumi & Hahn, 2021). Additionally, it must make this data easily accessible for reporting and analysis. Automating repetitive processes like rent collecting, maintenance requests, and lease renewals can significantly increase efficiency. This lowers the possibility of mistakes while also saving time. The system ought to make it easier for service providers, tenants, and property managers to communicate with one another. This includes updates on maintenance, leasing agreements, and rent due dates. Comprehensive financial management tools should be included in the system, such as the ability to track earnings and expenses, produce financial reports, and interface with accounting software.

According to the study, using a PMS in municipalities improves several property management-related factors. The use of PMS in municipalities has a positive effect on different aspects concerning property management in municipalities. The variables evaluated showed that PMS is efficient and successful in managing the lease register for the municipality. The results imply that using a PMS to track lease registrations in municipalities is a practical and efficient solution. These findings concur with those of Oyetunje et al. (2018) and Akinwamide and Bello (2019) who argued that innovative technologies applied in property management are effective and helpful in maintaining administrative records keeping for properties. These findings also indicate the relevance of technologies in assisting with property management.

4.7.2 Challenges due to non-deployment of PMS

The absence of a property management system can make managing lease registrations more difficult in several ways. The manual maintenance of lease registrations would be required in the absence of a property management system. This can be laborious and prone to mistakes made by people. Without a centralised system, it might be difficult to

remember all of the terms and conditions of each lease. This includes keeping track of rent amounts, lease terms, dates of renewal, and other crucial information. Without automated reminders, it is possible to forget about lease renewals, which could result in lost revenue. The transparency offered by digital property management systems is absent from manual systems. For property managers, getting access to current lease information can be challenging. Without a property management system, it can be difficult to generate information on lease performance. Reports on rental income, vacancy rates, and tenant turnover are included in this. Keeping track of lease registrations by hand gets harder as the number of properties rises. As the portfolio of properties expands, a property management system makes easy scaling possible.

The research findings indicate noteworthy challenges stemming from the non-implementation of PMS in municipal settings. Municipalities found it difficult to supply precise data for monitoring lease registries in the absence of a PMS, which resulted in a breakdown in communication and inefficiencies. Inadequate resources made the operation much more difficult, and the influence on billing procedures hampered revenue collection. Furthermore, problems like disorganised deployment resulted in inefficiencies, and malfunctions causing the loss of vital data, such as tenant information and lease agreements. The importance of PMS in revenue management was highlighted by the financial challenges brought forth by late property rate payments due to non-deployment of PMS. These findings agree with those of Sapkota (2019) who noted that manual systems in property management are a burden for data extraction, and calculation analysis.

4.7.3 Best practices and technologies for PMS deployment

In the study, key technologies and best practices for PMS deployment in municipalities were highlighted. The two main issues that arose were defining a clear deployment procedure and making sure the interface was easy to use. On the other hand, the integration of IT greatly improved the updating and accessing procedures, suggesting that data management has benefitted. Technological developments were crucial to the correct administration of data since they made it easier to adopt computerised PMS and allowed for efficient information retrieval. Furthermore, maximising the use of property information

resources was crucial for revenue collection and decision-making procedures, highlighting the need for thorough data utilisation.

The findings of the research offer insightful information about the advantages, challenges, and best practices associated with the use of property management systems in local governments. Policymakers and local authorities that want to improve their property management practices must comprehend these factors. Municipalities can enhance the efficiency and efficacy of managing lease registries, streamline operations, and fully utilise PMS by tackling the recognised obstacles and adopting optimal practices. These results also add to the larger conversation about effective data management in municipal settings by highlighting the critical role that technology plays in bringing administrative procedures up to date.

4.8 CHAPTER SUMMARY

This chapter covered the study findings and discussion of the study findings. The study findings reveal the effectiveness and efficiency of PMS deployment. It was noted that PMSs have a significant association with municipalities' property management. Additionally, challenges as a result of non-deployment of PMS in municipalities were highlighted. Lastly, the best practices and technologies for PMS deployment were revealed. These findings provide valuable insights into the importance of PMS in keeping track of lease registers in municipalities.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 CHAPTER OVERVIEW

This chapter presents a thorough summary of the research findings, based on an analysis of a Property Management System (PMS) and how well it managed the lease register for the municipality. The study assessed the effectiveness and challenges of PMS deployment in municipalities using data collected and analysed using SPSS. A summary of the main conclusions, a thorough analysis, and useful suggestions for municipalities and other property management stakeholders are provided in this chapter.

5.2 RESEARCH RESOLUTIONS

The study's primary aim was to investigate the effectiveness of the property management system of a selected municipality's lease register. To achieve this, particular questions in line with the study objectives were designed to direct the study. The study questions were; (i) primary research question: the deployment of a property management system to keep track of the municipality's lease register effective and efficient (ii) how best to deploy a property management system which is effective and efficient, (iii) the challenges associated with non-deployment of a property management system in keeping track of the municipal lease register and (iii) the best practices and new technologies of deploying a property management system that maintain lease details, property description, tenant details, and market-related rentals. These questions guided in the attainment of the study objectives, and the study resolutions to these objectives are established below:

Objective 1: To determine if the current property management system is deployed properly.

An extensive analysis was carried out in this study to evaluate the performance and efficacy of Property Management Systems (PMS) in the complex field of municipal property management. The effectiveness of a property management system in keeping track of the municipality's lease register was the main area of focus. Using strong techniques, the study carefully gathered and examined data using the Statistical Package for the Social Sciences (SPSS), guaranteeing a thorough and reliable analysis.

The results of this study clearly showed that PMS implementation has a significant association with several important aspects of property management in municipalities. The study showed, among other things, how PMS greatly improves leasing registry administration. PMS improved operations and ensured timely and accurate handling of lease-related information by automating difficult data processes. This study concludes by emphasising how important property management systems are to the modernisation of municipal property management procedures. The study's conclusions highlight PMS's transformative potential and how positively it affects municipalities' management of lease registrations

Objective 2: To investigate the challenges associated with the non-deployment of a property management system to keep track of the municipal's lease register.

Moreover, the study revealed the complex challenges municipalities encounter when a PMS is not present. The urgent requirement for precise data management was one of the major discoveries. Municipalities struggled with different data sources without a centralised system like PMS, which resulted in inconsistencies and inefficiencies. The study emphasised that proper lease registries are essential to efficient property management, highlighting the vital significance of exact reliable data. The challenges that result from not implementing PMS, such as poor communication, inefficiencies, and problems with collecting revenue, highlight how urgent it is to use cutting-edge technology solutions. In addition to stressing the need to put PMS into practice, the study also highlights the relevance of having a clear deployment strategy and user-friendly interfaces.

Objective 3: To the best practices and new technologies of deploying a property management system that maintains lease details, property description, tenant details, and market-related rentals. The study also underlined how important it is for municipalities to implement modern technologies and best practices in the field of property management. It became clear that adopting cutting-edge technology solutions was essential to overcoming the challenges encountered. The study emphasised the importance of integrating systems that are compliant with best practices rather than just deploying any PMS. Municipalities might guarantee a smooth information flow within their property

management procedures, reduce errors, and improve their operational efficiency by doing this.

5.3 CONCLUSION

This study essentially shed light on the groundbreaking potential of property management systems in municipalities' settings. It presents a strong argument for municipalities to invest in PMS by providing actual proof of its effectiveness and efficiency. In addition to providing a thorough assessment of current procedures, the research acted as a beacon of hope, pointing municipalities in the direction of a time when technology-driven, streamlined property management procedures will predominate, guaranteeing reliable, clear, and effective lease registry management. For municipalities to maintain lease registers effectively, integrating IT solutions and making the most of property information resources have become essential. Policymakers, municipal officials, and other stakeholders can make well-informed decisions and improve property management practices in municipalities with the help of these insightful insights. In addition to stressing the need to put PMS into practice, the study also highlights the relevance of having a clear deployment strategy and user-friendly interfaces. For municipalities to maintain lease registers effectively, integrating IT solutions and making the most of property information resources have become essential. Policymakers, municipal officials, and other stakeholders can make well-informed decisions and improve property management practices in municipalities with the help of these perceptive insights.

5.4 RECOMMENDATIONS

The following recommendations are offered to both municipalities and stakeholders in relation to PMS in municipalities:

To Municipalities:

- Deploy PMS into Practice: To improve operational efficiency, lower manual error rates, and guarantee transparent lease administration, municipalities should give high priority to the use of property administration systems.
- Training investment: Municipalities must invest in training to ensure correct comprehension and utilisation of the system's features by providing staff members with training and resources to help them use PMS efficiently.

- Continual Updates: Municipalities need to make sure the PMS software is updated frequently to take advantage of the most recent safety improvements and technological developments.

To Stakeholders:

- Encourage Implementation: Stakeholders must assist municipalities in putting robust PMS solutions into place by offering them financial and technical assistance.
- Collaborative Initiatives: Stakeholders must promote cooperation between IT companies and municipalities to provide specialised PMS solutions that meet particular municipality needs.

5.5 SUGGESTIONS FOR FUTURE RESEARCH

The following areas of study should be taken into account in future property management and technology deployment in municipalities:

- Comparative Research: Examine the benefits and drawbacks of various PMS solutions in a range of municipal contexts by conducting comparative research.
- Examine the user experience and satisfaction ratings of tenants, property managers, and municipal employees utilising PMS platforms to pinpoint areas in need of improvement.
- Integrating Innovative Technologies: To further optimise property management procedures, studies must look into the integration of PMS with cutting-edge smart technologies like predictive analytics and Internet of Things devices and see if their integration can optimise property management in municipalities.

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APPENDICES

Appendix A: Questionnaire

QUESTIONNAIRE

Please mark each response by making a tick or a cross response with a PEN (not a pencil)

IF YOU DO NOT WISH TO PARTICIPATE NO ACTION FURTHER ACTION IS REQUIRED

SECTION A

DEMOGRAPHIC INFORMATION

Municipality

1. Your age……. (under 30) (30 – 39) (40 – 49) (50 – 59) (60 plus)

1. Years of experience in the Municipality…..... (0 - 5yrs) (5 – 10yrs) (10 – 20yrs) (20 yrs plus)

3. Male () Female ()

Tenants

1. Your age……. (under 30) (30 – 39) (40 – 49) (50 – 59) (60 plus)

2. Years of been a tenant…..... (0 - 5yrs) (5 – 10yrs) (10 – 20yrs) (20 yrs plus)

3. Male () Female ()

SECTION B

DEPLOYMENT OF A PROPERTY MANAGEMENT SYSTEM WHICH IS EFFECTIVE AND EFFICIENT

	Strongly disagree	Disagree	Neutral	Agree	Strongly disagree
1. The property management system is the best in keeping track of the Municipality's lease register.					
2. The property management system provides all the information regarding keeping track of the Municipality's lease register.					
3. The property management system allows the Municipality to keep track of the lease register.					
4. The property management system allows the Municipality to communicate issues pertaining to keeping track of the lease register.					
5. The property management system is effectively used to make analysis to track the Municipality's lease register.					
6 The property management system bills the customer.					
7. There are adequate resources in the Municipality to facilitate operation of property management system in tracking the lease register.					
8. The staff have the ability to retrieve information from the property management system.					
9. Property management system has information regarding keeping track of the Municipality's lease register.					

SECTION C

CHALLENGES ASSOCIATED WITH NON-DEPLOYMENT OF A PROPERTY MANAGEMENT SYSTEM IN KEEPING TRACK OF THE MUNICIPAL LEASE REGISTER

	Strongly disagree	*Disagree*	*Neutral*	*Agree*	*Strongly disagree*
1. Failure to provide the information regarding keeping track of the Municipality's lease register					
2. Failure to communicate issues pertaining to keeping track of the lease register.					
3. Failure to effectively make the analysis to track the Municipality's lease register.					
4. The risk of falling to bill the customers.					
5. Inadequate resources in the Municipality to facilitate operation of property management system in tracking the lease register					
6. Inability to retrieve information from the property management system					
7. Unorganized deployment of property management system in keeping tracking of the Municipality lease register.					
8. Malfunctioning of Municipality as they lose property information such as lease agreements and tenant's information					
9. Failure to pay property rates on time					

SECTION D
BEST PRACTICES AND NEW TECHNOLOGIES OF DEPLOYING A PROPERTY MANAGEMENT SYSTEM

	Strongly disagree	Disagree	Neutral	Agree	Strongly disagree
1. There is a well-established procedure of deploying a property management system to maintain lease details, property description, tenant's details, and market related rentals.					
2. The property management system is user friendly.					
3. The accessing and updating of property management system information will be considerably improved using information technology.					
4. The property information resource would be used to its full potential if property information was easy to access and updated.					
5. Technology advancements have assisted the Municipality in proper data management for successful decision-making.					
6. A strong information management strategy could be used, and the property information resource would be used to its full potential if the property information was easy to access and updated.					
7. Updating lease records and creating a computerized Property Information Systems are necessary for the appropriate administration, productivity, and development of the land resource.					
8. Ability to retrieve information from the property management system.					
9. Making the best of property information resource's prospective advantages in terms of optimal revenue collection and record accessibility for smart decision-making.					

THANK YOU FOR YOUR PARTICIPATION

Appendix B: Informed consent

Investigating the effectiveness of the property management system of a selected municipality's lease register.

Student Name: Sita Mvubu

Contact.: sita.mvubu@gmail.com

Degree: Masters in Business Administration

CONSENT TO TAKE PART IN RESEARCH

I hereby confirm that

➢ I voluntarily agree to participate in this study.

➢ I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind

➢ I have had the purpose and nature of the study explained to me and I have had the opportunity to ask questions about the study.

➢ I understand that participation involves being asked questions verbally with a semi-structured questionnaire and that the data will be used as part of the research.

➢ I understand that I will not benefit directly from participating in this research.

➢ I understand that the information provided will be treated confidentially.

➢ I understand that in any report on the results of this research my identity will remain anonymous.

➢ I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage.

➢ I understand that I am free to contact the researcher to seek further clarification and information.

Signature of the participant: _____ Date: _____

Signature of the researcher: _____ Date:_____

Appendix C: Letter to the municipality

Buffalo City Metropolitan Municipality
East London | Bhisho | King William's Town
Province of the Eastern Cape
South Africa

Website: www.buffalocity.gov.za

BUFFALO CITY
METROPOLITAN MUNICIPALITY

Spatial Planning and Development
PO Box [illegible], East London 5200
4th Floor, Old Mutual Building, East London, 520[illegible]

Tel: 043 722 5167 | Fax: 043 722 2026
Email: [illegible]@buffalocity.gov.za

Ms S. Mvubu
19 Kay Road
Amalinda
East London
5200

Authorization To Conduct Research Study

Dear Madam

The purpose of this letter is to inform you that I, Lucy Deliwe (Programme Manager: Property Disposal and Acquisitions) give Ms Sita Mvubu permission to conduct the research titled ***"Investigating the effectiveness of a property management system in keeping track of the Municipality's lease register"*** at Buffalo City Metropolitan Municipality. This also serves as assurance that this study complies with requirements of the Privacy Act and the protection of confidential and classified information and will ensure that these requirements are followed in the conduct of this research.

Sincerely,

L. DELIWE
PROGRAMME MANAGER

BUFFALO CITY METROPOLITAN MUNICIPALITY
A city growing with you!

Appendix D: Ethical clearance certificate

Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Fax: 018 299-4910
Web: http://www.nwu.ac.za

Senate Committee for Research Ethics
Tel: 018 299-484
Fezlwe.Mseleni@nwu.ac.za

24 May 2023

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Economic and Management Sciences Research Ethics Committee (EMS-REC)** on, 24/05/2023 the Economic and Management Sciences Research Ethics Committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-REC) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Investigating the effectiveness of a property management system in keeping track of the Municipality's lease register

Study Leader/Supervisor (Principal Investigator)/Researcher): Dr K Ndlovu

Student S Mvubu (43471129)

N	W	U	-	0	0	6	6	5	-	2	3	-	A	4

Institution Study Number Year Status

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Application Type:
Commencement date: 24/05/2023 **Risk:** Minimal
Expiry date: 24/05/2024
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.

Special in process conditions of the research for approval (if applicable):

•

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply:

- *The study leader/supervisor (principle investigator)/researcher must report in the prescribed format to the EMS-REC:*
  - *annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and*
  - *without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study.*
- *The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the EMS-REC, prior to*

Appendix E: Language editing certificate

Registered with the South African Translators' Institute (SATI)

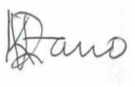
Reference number 1000686

23 November 2023

Investigating the effectiveness of the property management system of a selected municipality's lease register

This confirms that I edited substantively the above document, including a Reference list. The document was returned to the author with various tracked changes to correct errors and clarify meaning. It was the author's responsibility to attend to these changes.

Yours faithfully



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