



University of Cape Town - Faculty of Engineering & the Built Environment
Department of Construction Economics and Management

**INVESTIGATING THE IMPLEMENTATION OF FACILITIES MANAGEMENT
STRATEGIES WITHIN THE NAMIBIAN GOVERNMENT**

A minor dissertation submitted in partial fulfilment of the requirements for the degree
of Master of Science in Property Studies at the University of Cape Town

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ABSTRACT

Research on Facilities Management (FM) indicates that it is able to positively influence the performance and success of organisations in various ways including strategy, culture, resource control, service provision, supply chain management and change management. Although FM has developed as a best practice and evolved into a positive approach to managing the physical environment of organisations, its success is predominantly seen and experienced in the business or private sectors and is reflected in FM research which has little or no focus to broader advances in social and organisational science.

The role of FM professionals in Namibia, in both the private sector and within the government, has not been extensively researched. Currently there is no statutory body that regulates the FM profession. Thus, this research will look to add to the existing knowledge base specifically regarding how FM is currently being implemented within Namibian government facilities.

Relevant information was obtained from the literature review and a case study methodology was adopted using a single case study because the research topic aims to highlight how FM is currently being executed within the Namibian government, to add to the existing knowledge base within the Namibian context. The case study research was applied to this research qualitative research design, using semi-structured interviews, the researcher had a list of different questions covering six focus areas. The researcher used thematic analysis to analyse the qualitative data.

Overall, the research indicates that there is systemic failure to maintain and effectively manage existing government infrastructure because FM in Namibia is inefficiently implemented. The analysis of the results identified the following barriers to effective FM namely, lack of funding and resources; lack of strategic plans, including preventative maintenance plans; competing priorities, in particular political agendas that do not align to best practices; poor or no performance management; and poor or no benchmarking. The findings show that there is room for growth and great need to better manage facilities, but it will require a substantial investment in both financial terms and in the upskilling of human capital. Although the outlook is quite negative, there are numerous suggestions made on how to improve.

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LIST OF ABBREVIATIONS

BIFM	The British Institute for Facilities Management
CSF	Critical Success Factors
FM	Facilities Management

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Society or social development is linked to space or the development thereof. Distinct spaces often signify importance to us, mirror our cultures and manage relationships (Grimshaw, 2004). In modern civilisations, physical space is a significant regulator and modern individuals are largely defined by it (Grimshaw, 2004). Physical environments are believed to play a critical role in the wellbeing of people and contribute positively to efficiency, profitability, and productivity, therefore, the management of space is seen to be an important social responsibility (Grimshaw, 2004).

Facilities Management (FM) has emerged over the last half century and is generally described as the method adopted by an organisation to manage the use of physical structures, space, assets and services to support the primary function of an organisation (Alexander, 2003; Chotipanich, 2004; Melvin, 1992). The beginning therefore of the practice (FM) is grounded in the connection between place, space, and people. As a result of computers being introduced into workplaces and a growing need to reduce costs in organisations, the FM practice evolved (Alexander, 2013; British Institute of Facilities Management, 2014; Cloete, 2002; Shah, 2008). Today, FM is an ever-growing global industry which is intertwined with strategic elements of organisations.

Although FM has developed as a best practice and evolved into a positive approach to managing the physical environment of organisations, its success is predominantly seen and experienced in the business or private sectors and is reflected in FM research which has little or no focus to broader advances in social and organisational science (Price, 2002). Typically, FM has been driven by the private sectors' focus on the strategic and operational dimensions and alignment of their policies through facilities and services, with the profits being the greatest measure of success (Alexander, 2003; Atkin & Brooks, 2005; Barrett & Baldry, 2003; Michell, 2012; Nutt & McLennan, 2000). Melvin (1992) comments that it would be naïve to think that it would have transferred directly to government facilities as the government has more complexities to consider with their interlinked and interdependent responsibilities

which stretch beyond profit (Gordon, 1993). The management of government facilities is different in that it is required to evaluate multifaceted often opposing goals and must strike a delicate balance between succeeding in terms of financial performance while still maintaining and serving public interest or public good (Michell, 2012; McShane, 2008).

Globally, governments are seen to have been more resistant to change (Jack, 1994) and as a result has seen increasing deterioration of community and government facilities (McShane, 2008). Governments are faced with the escalating effects of increasing structure costs, maturing asset portfolios, development pressures in urban regions, and an increasing need to provide more services to local communities (McShane, 2008). Governments are further criticised for compounding these issues with their ineffective management of properties (McShane, 2008), lack of strategic planning, preoccupation with cost cutting, and failing to impose structures necessary to maintain economic efficiency, service delivery and quality of life (McShane, 2008).

After the end of the First World War, in 1920 the League of Nations mandated the administration of Namibia (at the time a colony known as South West Africa) to South Africa. As Mandatory power, South Africa imposed its laws, including racial classifications and rules. The National Party was elected to power in South Africa from 1948 and imposed the same apartheid laws in South Africa and Namibia. This caused South African cities to be racially segregated in residential areas with lack of services to marginalised groups, a concentration of these marginalised groups on the city edge (Michell, 2012; Robinson, 2008) and unequal opportunities between different groups (Michell, 2012; Parnell, 2005); this phenomenon is still mirrored in cities in present day Namibia.

Government is the largest property portfolio holder in South Africa it plays a vital role in rebuilding local communities (Michell, 2012) and bears an enormous responsibility to the community. This too is the case in Namibia with Government's property portfolio currently valued at R20 billion (Ngweda, n.d.). Globally success of FM practices in government facilities has been noted, but these practices have largely been developed in and for developed countries (Amos, 2021).

It is imperative to learn from the ineffective management of government properties/community facilities to understand how to adapt the strategic FM approach

to government facilities, by considering the broader social characteristics that are apparent in the management of government/community facilities. This will facilitate the understanding of the FM role in government facilities and help identify best practices for the government facilities in order to ensure that government lives up to its mandate to alleviate poverty and develop infrastructure to support their social functions. The relationship between strategic FM and government facilities remains unclear. Additionally, it is important to have research dedicated to the understanding and development of FM within government facilities, as very little research has explored this relationship or identified best practice within government facilities.

The proposed study aims to contribute to the bridging of the aforementioned knowledge gaps in the Namibian context. More specifically, the proposed study aims to add to the understanding of the role FM plays in the running of government's property assets, and the effect that that has on the internal stakeholders of the buildings. This chapter defines FM and discusses the development of FM profession. Subsequently, the best practices are discussed in addition to application thereof in the private sector and within government facilities. It is proposed that understanding the systemic approaches will produce better results in the operationalisation of FM within government facilities. After this, the problem statement of this study will be stated as well as the research questions, aims, premise, and objectives. Furthermore, the methodology including the research strategies and techniques will be discussed.

1.2 Background

1.2.1 Facilities Management in the Namibian Government

The Namibian Government has the single largest property portfolio in the country with the total value of building assets currently estimated at R20 billion (Ngweda, n.d.). For Government to execute its mandate, these assets must be properly managed to support the delivery of a wide range of public services which fulfil the economic, social, and environmental needs of the community. The effective implementation of FM management strategy can assist in maximising the utility of the building assets (Jensen, 2010; Zavadskas et al., 2017) as well as the building user's output (Jensen, 2010). The role of FM professionals in Namibia, in both the private sector and within government facilities, has not been extensively researched. Currently there is no statutory body that regulates the FM profession.

As a result of the above, there is a need for research to be carried out regarding the FM profession within the Namibian context to add to the existing knowledge base. There is an opportunity for the FM profession to be better understood and utilised by stakeholders with the government and this makes the research subject both interesting and important.

1.3 Research Problem

A limited amount of research has been carried out regarding FM within Namibia. The lack of scientific research available on FM has led to the profession not being widely viewed as a necessary and beneficial tool for the more efficient management of facilities in Namibia. This gap in Namibian specific FM knowledge has resulted in Facilities Managers not being used within most organisations. This fact is especially problematic within government facilities as Government is tasked with maximising the use public funds and resources. The successful management of government's large property portfolio is vital in achieving this goal.

This research is exploratory in nature and the main objective is to add to the FM knowledge base specifically within the government of Namibia using a qualitative approach.

1.4 Research Question

The FM profession within Namibia has not been extensively researched. Thus, this research will look to add to the existing knowledge base specifically regarding how FM is currently being implemented within Namibian government facilities. Based on this, the main research question is:

“What are the current perceptions of the internal stakeholders of government facilities regarding the implementation of the current Facilities Management strategies?”

In addition, this research will explore the following sub-questions:

1. What informs how the government facilities are managed?

This sub-question aims to determine the decision makers' rationale in determining how the FM is being implemented and to establish if the same rationale is implemented for all government facilities.

2. To what extent are the current FM philosophies & best practices being implemented in government facilities?

There is a vast knowledge base on FM best practices that have been successfully implemented globally. This sub-question aims to highlight which FM best practices are being implemented as well as identify if there is a need for others to be put in place.

3. What role do the facilities occupiers play in determining how FM is carried out in government facilities?

With this sub-question the researcher aims to highlight the role that the facilities occupiers play in determining the FM strategy that is executed within the facilities.

4. What are the key factors contributing to differences in management approaches among government facilities that share similar characteristics or functions?

By exploring this question, researchers seek to uncover the critical factors, such as organizational, contextual, or structural elements, that influence decision-making and operational strategies within these facilities. This understanding is valuable for policymakers, facility managers, and stakeholders as it can inform more effective and tailored management practices, resource allocation, and policy development, ultimately enhancing the efficiency and effectiveness of government facilities management.

1.5 Research Proposition

The proposition for this study is:

The current perceptions of the internal stakeholders of government facilities regarding the implementation of the current Facilities Management strategies can be established.

1.6 Aim of Study

The aim of this study is to comprehensively assess and analyse the current perceptions of internal stakeholders within Namibian government facilities with the objective of gaining a deeper understanding of their perspectives and attitudes towards the implementation of existing Facilities Management strategies.

1.7 Research Objectives

The main research objectives for this dissertation is to assess and analyse the perceptions of internal stakeholders in government facilities regarding the

effectiveness and adequacy of the current Facilities Management strategies in place. The secondary objectives are:

- To ascertain the factors influencing the practices of FM within government facilities. To determine the extent to which current FM philosophies & best practices are being implemented in government facilities.
- To understand the role that facilities occupiers play in determining how FM is carried out in government facilities to examine variations in the management approaches employed across similar government facilities.

1.8 Research Methodology

A social constructivist philosophical position has been utilised for this research and was implemented with the following research methodology being applied:

A critical review of the existing literature on FM is undertaken to provide an introduction into to the theory of FM and provide a critical overview of FM within government facilities.

A case study strategy methodology was adopted using a single case of the implementation of FM strategies in the Namibian government was undertaken. A qualitative approach was utilised. Semi-structured interviews were conducted with local authorities who all completed and signed a consent form. The interviews were one-on-one discussions between the interviewer (the researcher) and the interviewee (the respondent). The interviews were transcribed, and observations notes were made during the interview.

The qualitative data was analysed using thematic analysis and critically discussed in terms of the literature.

Finally, conclusions are drawn, and recommendations are made in terms of ways to improve the implementation of FM in the Namibia government.

1.9 Limitations to Study

The purpose of this section is to provide a concise overview of what the researcher perceives as the limitations of this study and the manner in which they were mitigated.

One of the main limitations encountered pertains to the presence of bias, both from the interviewers and interviewees. Given that this research heavily relied on conducting interviews, it is essential to acknowledge the potential for bias which is commonly recognised as a challenge within qualitative research (Galdas, 2017). Individuals conducting qualitative research play a vital role in both shaping the process and contributing to the ultimate outcome, and any attempt to isolate them from this process is neither feasible nor advantageous (Galdas, 2017), however there are methods to reduce the impact of interview bias (Mruck, & Mey, 2007). The strategies implemented in this study included:

- Interview Scheduling: The interviews were arranged to accommodate the interviewee's preferred time and location.
- Interview Methodology: Semi-structured questions were used to allow for two-way conversation, enabling the interviewee to exert more control over the conversation.
- Building Interview Rapport: There was a readiness to respond to questions posed by the interviewee both before and after the interview, which occasionally involved sharing personal details.

The other notable constraint lies in the study's exclusive focus on the implementation of FM within government facilities in Namibia. While this targeted approach allows for an in-depth analysis of a specific context, it may restrict the generalizability of findings to a broader spectrum of organizational settings. Consequently, it is essential for readers to exercise caution when extrapolating the insights derived from this study to diverse geographical, cultural, or institutional contexts. Despite this limitation, the findings of this research are anticipated to offer valuable insights into the challenges and opportunities associated with FM implementation in public sector facilities in Namibia, thereby contributing to the body of knowledge in this field and potentially serving as a foundation for future comparative studies in other regions. Furthermore, to enhance generalizability, a concerted effort was made to select a diverse sample of government officials. Another challenge in this case study is the limitation posed by the small size of the Namibian population and therefore government in Namibia. With a relatively small number of government facilities and departments compared to larger nations, the available sample size for this study may be inherently limited. This

constraint could impact the extent to which our findings can be generalized, however, this was mitigated by:

Snowball Sampling: Because it was challenging to access a large sample, snowball sampling was employed where interviewees were asked to refer other potential participants. This has been noted to be particularly useful when studying a small population (Zickar, & Keith, 2023).

Leveraging qualitative research methods: A case study methodology was used to allow for in-depth exploration and analysis, gleaning valuable insights despite the small scale, contributing to a richer understanding (Yin, 2009). of Facilities Management implementation in the unique context of Namibia's government

1.10 Dissertation Outline

This dissertation is organised into five chapters along with references and appendices as follows:

Chapter one provides an introduction and background to the study of FM providing context and continues with the research problem, research question, aim of study, research objectives, limitations to the study, research assumptions and dissertation outline.

Chapter two is a critical literature review providing a general understanding of what Facilities Management (FM) is. It further provides information about the divisions of FM, FM within government facilities, the difference between FM in Private Sector vs Government Facilities, FM Performance Measurement, A Behaviour Approach to FM, FM Benchmarking and a summary of the key findings and literature review.

Chapter three provides the research methodology, where the “research onion” approach is applied which consist of the Research Methodology, Research Philosophy, Research Approach, Research Strategy, Research Ethics, Research Design, Techniques and Procedures, Validity and Reliability, Sampling and Limitations.

Chapter four provides an analysis and discussion of the data which has been collected through semi structured interviews. The data has been analysed through thematic analysis.

Chapter five is the conclusion which revisits the research objectives and questions, provides recommendations for further research, industry and government and ends with a conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter the researcher will examine the relevant literature pertaining to the research problem at hand. This section will look at what the literature says regarding the execution of FM in general as well as specifically within government facilities, as well as FM theories, principles, and methodologies are also discussed.

2.2 Facilities Management: An In-depth Exploration and Definition

FM is the coordination of physical spaces, resources, and services to support the main operations of an organisation in an effective and efficient manner. The function of FM is often described as a bridge between the physical workspace and its occupants, with numerous authors emphasising this concept throughout the literature (Alexander, 2003; Chotipanich, 2004; Melvin, 1992). Other writers in the field have also echoed this idea (Baum, 1994; Douglas, 1996; Varcoe, 1993; Massheder & Finch, 1988).

Although FM is adopted differently in various organisations based on their specific needs, FM most commonly covers the basic physical maintenance and operations of space with the focus on economic efficiencies and cost cutting (Chotipanich, 2004) and traditionally follows a hierarchical approach, which adopts a top-down perspective, imposing one way in which things ought to be done (Grimshaw, 2004). This traditional view of FM has since evolved which Payne (2002) attributes to a number of factors.

FM is said to have emerged with the growing pressure to cut costs and the correlation between facilities and worker productivity (Alexander, 1994; Shah, 2008). Duffy et al. (1976) noted the appearance of FM but attributed it to the response to the changing requirements of occupiers using buildings/facilities, the deficiencies of the facilities/buildings noted by them and the need to manage these changes, to adapt and improve. We note the fundamental shift in focus seen in FM due to the rapid changes in society and continuous development of information and communication technology (ICT) (Alexander, 2013). The growing demand to be competitive within the rapidly changing ICT environment has a significant impact on the structure of organisations and equally FM has needed to evolve.

The traditional concept of FM is dated. FM today is constantly developing and evolving and as a result there is a lack of clarity on the concept of FM, in that there is no one accepted “universal” definition of the concept (British Institute of Facilities Management, 2014; Grimshaw, 2003). It has a wide scope and interdisciplinary nature creating a multi-faceted profession (British Institute of Facilities Management, 2014; Drion et al., 2012). Drion et al. (2012) highlight the challenges that FMs face in the integration of practices originating from various disciplines such as construction, business management, engineering and behavioural and social sciences, which speaks to the difficulty in development of an all-encompassing definition. FM has a number of definitions which are discussed below.

Noor and Pitt (2009, p. 215) summarise FM management as:

“Creating an environment that is cohesive to carry out an organisation’s primary operations, taking an integrated view of the services infrastructure services and use it to give customer satisfaction and value for money through support for an enhancement of the core business. Atkin and Brookes (2000) develop this definition to describe FM as something that will:

- *Sweat the assets;*
- *Enhance an organisations culture and image;*
- *Enable future change in the use of space;*
- *Deliver effective and responsive services; and*
- *Provide competitive advantage to the organisation’s core business.”*

Another early definition of the term FM provided by Grimshaw (2003, p. 50):

“Facilities management is a technical function concerned with maintaining the practical utility of the physical infrastructure to ensure it supports the core activity of an organisation”.

A similar definition is provided by the ISO standard which notes that FM is a function within an organisation that integrates workers, the workplace, and processes with the main resolve of enhancing productivity of the core business as well as the employee experience (International Organization for Standardization [ISO], 2018)

These definitions are a more accurate description of FM at the emergence of the field, as both definitions characterise and classify FM in a rudimentary fashion focusing mainly on the technical aspects of the profession. Both definitions fail to incorporate or include the other aspects which impacts the FM such as strategic objectives and the pressures to be more cost efficient (De Toni et al., 2006; Tobi et al., 2013).

Grimshaw (2003, p. 51) continues to develop his definition of FM by incorporating some of these elements:

“Facilities management is a strategic function concerned with the forward planning of physical infrastructure resources to support organisational development and reduce risk”.

A more holistic definition that recognises the variety of practices integral to the more evolved scope of FM is offered by The British Institute for Facilities Management (British Institute of Facilities Management):

“Facilities management is the integration of processes within an organisation to maintain and develop the agreed services which support and improve the effectiveness of its primary activities” (British Institute of Facilities Management, n.d.).

Boyle (2016) comments on the definition offered by the BIFM, observing that the definition is intentionally indistinct to enable the description to represent the multitude of integrated processes of FM. He believes this definition to be a more accurate reflection of FM in its current state. And concludes that for the foreseeable future a clear definition for FM is likely to be disputed because of FM’s wide scope and interdisciplinary nature which results from its continuous expansion and adaption to our changing environment.

While the definition of FM remains unclear, the significant impact of FM in the success of core business operations and realisation of operational goals is well established (Barrett, 2000; British Institute of Facilities Management, 2014; Drion et al., 2012). The activities that an organisation focuses its operations on, is referred to as the core business operations. Abera (2017) explains that FM enables organisations to maximise the use of property/facilities which in turn allows an organisation to focus on the core business operations and ultimately facilitates the accomplishment of

organisational goals. It has become more evident that there is significant value in FM within an organisation and as a result we note that FM has rapidly been assimilated into organisations strategic decisions. This is attributed to increased competition between businesses which compels them to embrace quality, re-engineer and reassess procedures and maintenance of facilities in order to outperform their competitors (Sweeney, 1996) but also as a result of the shift in the view from facilities being viewed as an asset, to the understanding that it is strategic resource and working environment (Grimshaw, 2003). Consequently, this shift in view, results in organisations endeavouring to maximise their return of investment (in the facility) by making best use of the property (Grimshaw, 2003) rather viewing it only as an asset and thus the relationship between importance of correctly managing the property and the success of the organisation is highlighted. The FM industry and profession are globally recognised and estimated to be a 100-billion-pound industry in the United Kingdom (British Institute of Facilities Management, 2014).

In summary, FM began as the simple management and operation of a facility but has since become an important strategic discipline crucial for the accomplishment of an organisation's core objectives and its ensuing success. Predominantly the FM profession focuses on the economics of being the owner of a building and maximising the return of investment by making the best use of the property in support of the organisation's goals. FM includes many processes, activities, services and facilities, and leverages off skills from a number of professions. However, they are primarily grouped these under two headings namely: operational and strategic FM (Nutt & McLennan, 2000).

2.2.1 Divisions of Facilities Management

(a) Operational Facilities Management

Operational FM covers the basic physical maintenance and operations of space with the focus on economic efficiencies and cost cutting (Chotipanich, 2004) and traditionally follows a hierarchical approach, which adopts a top-down perspective, imposing one way in which things ought to be done (Grimshaw, 2004) with no investigation or decision making (Langston & Lauge-Kristensen, 2002). It is described as the daily processes and management of a structure or building, and its primary function is to support the day-to-day operational tasks of a business in relation to the

building and the management thereof (Joudah, 1996). Despite the lack of investigation or decision making in operational FM, it is still important for maintaining facilities which is essential for business outputs and is a vital support service, which when effectively planned produces significant returns for the organisation (Alexander, 2013). Michell (2010) contends that research is inclined to be largely focused on operational concepts within FM and predominantly operational FM is practiced in organisations, where the focus is on the technical issues at an operational level. This prevalence of operational FM results in organisations being limited to technical and supportive roles, which represents a rudimentary form of FM. Operational FM responds to the operative running of a facility as necessitated by the occupants of the building to create a comfortable and productive environment while maintaining cost effectiveness and is therefore further classified as being reactive (Barrett, 2000). The understanding and implementation of these operational principals are easier than strategic FM (Duffy, 2000).

(b) Strategic Facilities Management

Strategic FM is directed by a purpose which is set with a long-term perspective, requires active management and a consideration of the wider context in which facilities are operated (Jack, 1994) and therefore covers a number of issues related to the specific organisations strategy and policy (Chotipanich, 2004). It focuses and acknowledges the responsibility to its societies or organisation's needs and makes attempts at incorporating a more holistic, involved, incident, bottom-up approach (Brackertz & Kenley, 2002; Chotipanich, 2004; Grimshaw, 2004). As the names suggests, strategic FM is more sophisticated than operational FM, in that it creates a relationship between the organisations core business goals and the physical structure by looking beyond creating an efficient functioning space. Strategic FM combines the physical facility goals with the strategic plans by understanding the purpose and objectives of an organisation and then determining the actions required to achieve these within the facility (Langston & Lauge-Kristensen, 2002). Strategic FM entails more to be effectively utilised than operational FM, in that an in-depth understanding of the organisation and its role within industry is required. Alexander (1994) concludes that the three elements for the successful implementation of strategic FM are: *meaning* – how FM is defined; *management* – clear guidelines for practice and *measurement* – how to evaluate rate and levels of improvement. Facility managers are said to be

aware of these elements however relevant information and processes are not readily available for them to act on these effectively (Brackertz & Kenley, 2002) and as a result businesses are often not able to realise the full potential of their facilities. Despite these challenges and because of the growing demand to be competitive there has been a fundamental shift (Alexander, 1994), where strategic FM is now largely acknowledged to add value at an executive level, be best practice and a more fitting approach (Alexander, 2013; Brackertz & Kenley, 2002). Alexander (1994) continues to emphasise that generally there is a need for long term planning and that organisations need to align facility management to their strategies and move to holistic policies which consider social elements. Although more research is needed to fully understand the interactions and inter-dependencies which are prevalent at the strategic level of FM, it is concluded to be central to executing comprehensive and effective FM solutions (Noor & Pitt, 2009).

2.2.2 FM in Government Facilities

In governments, the decentralisation of decisions to administrative offices, results in deficient standard procedures and policies for the strategic management of their facilities and a poor overview over their buildings (Jensen & Due, 2008; Olsson et al., 2015). The practice of FM within government facilities is often not as a result of strategic decisions but rather the result of coincidences and past history (Jensen & Due, 2008). Consequently, many government facilities are dilapidated due to poorly planned FM (Hopland, 2016) and exasperated by politicians' and policy makers' biased and irrational behaviours as a result of ambiguous roles and directives. For a more sustainable facility portfolio, it is important to develop best practices and identify the roles of facility managers within government facilities (Galamba & Nielsen, 2016).

Research indicates that FM in governments is an under-researched field (McShane, 2006), that the social value of community and government facilities lacks understanding and ways in which it can be evaluated and operationalised is not established or well defined (McShane, 2006). Additionally, success of FM practices in government facilities has been noted, but these practices have largely been developed in and for developed countries (Amos, 2021). Even though there are similarities between the private sector and government facilities, the main difference is that facility managers within government facilities operate within political environments where

they are required to meet targets and ambitions of political groups as well as operate within ethical codes and public administrative regulations and rules (Galamba & Nielsen 2016; Hartmann et al., 2008). Furthermore, government facility managers need to adjust their operations to align to the prospective short-term political decisions, within yearly budgets (Olsson et al., 2015; Persson & Bratt 2010) and must compete with several different administrative offices for resources. As a result, within government facilities, it may be challenging to motivate for FM than other initiatives that will more easily secure votes (Hopland, 2016). These issues are said to contribute to the sluggishness of developing a framework for FM within government facilities (McShane, 2006). Further concerns include:

- The fear around the loss of community and social capital and those authorities struggle to manage their existing facilities (McShane, 2008);
- Facility management's measure of success focus remains on profit (Price, Ellison & Macdonald, 2009); and
- The absence of social value in policy frameworks (McShane, 2006).

There is increasing pressure to identify and measure qualitative outputs across a range of government facilities (McShane, 2008). Jack (1994) in his research, highlighted the importance for any organisation (private or government) to have its procedures measured, both qualitatively and quantitatively, against best practice standards and that opportunities in the FM models are increasingly being realised for the government facilities. McShane (2006) echoes this, noting that there are few examples in Australia where community facilities have clearly defined policy or operational evaluation criteria beyond financial or environmental performance which restricts measurement against more quantifiable service and social objectives. Jack (1994) concludes that governments can gain valuable insight from the private sector and that strategic FM is the only way forward. If well defined, strategic FM can act as a management aid by setting clear objectives by defining roles, responsibilities, and priorities clearly in the context of community facilities balancing the requirements of service managers, the community and facility managers (Brackertz & Kenley, 2002). This was demonstrated in the Brackertz & Kenley (2002) research; however, they cautioned that careful consideration must be taken when adapt these models to ensure that performance measurement systems facilitate better service delivery, rather than being used as a tool to control management.

2.2.3 Facilities Management in Southern African Local Governments

In South Africa, there is a challenge facing the government in managing their existing and ageing facility portfolio as many government facilities, such as schools, prisons and hospitals, were erected in the 60s, 70s and 80s. This phenomenon is mirrored in Namibia as similar pre-independence government buildings are still widely used. These facilities are dated and require extensive renovation or even replacement. How facilities are utilised, operated and managed, has a large impact on the building sector as a whole, society and even the environment (Nielsen et al., 2016). In order to realise the primary goal of sustainability, it is essential to address the deficiencies in existing facility portfolio of the government and the existing policies that are in place (Wood, 2006). With government commissioning a large share of the work in the construction industry, government has a pivotal role to play in (Eisma & Volker, 2014) and acts as catalyst for broader sustainable and societal change (Galamba & Nielsen 2016).

Research concerning of the role that FM can play in influencing economic growth and social development through the management and operationalisation of facilities in previously disadvantaged populations undertaken in South Africa is relatively new and limited (Michell, 2012). Michell (2010) indicates that research in this field has been diverse and reflective of international research that is inclined to be largely focused on operational concepts within FM.

Ngowi and Mselle (1998), highlight how a number of government departments have policies in place that involve social values but lack operational frameworks to translate the policy into practice. It is said that in social, environment or economic terms, the South African systems fall short of being inclusive, resulting in the continuing marginalisation of the poor. Furthermore, case studies concluded that there is little participation by the community in the development or management of government facilities and that the government FM is largely operational with minimal strategic focus (Bam, 2007). Pieterse (2010) reports that Cape Town's struggle to develop sustainable solutions for poor urban classes is due to the lack of public focus in the understanding of development efforts. In addition, that the private sector who drives the economy has an unequal input in what kinds of infrastructure is prioritised and where it is located and that current policies continue to reinforce the current status quo. Michell (2012) concludes that the government needs to adopt a capacity focused view, increase its focus on communities and their capacity to self-manage and provide

consistency to management and operation of public services within government, in order for government to accomplish their goals.

It is clear within the FM literature that the primary focus of the research in the Southern African context has been primarily focused on private sector FM and that little research has been conducted on FM within government facilities. Therefore, it is the intention to build on research already conducted with the main aim to contribute to the knowledge of the field in the Namibian context, specifically examining to what extent are the current FM philosophies and practises are being implemented within government facilities and to what extent internal stakeholders of government facilities find the current FM processes to be effective.

2.2.4 Difference between FM in Private Sector vs Government

Although FM has developed as a best practice and evolved into a positive approach to managing the physical environment of organisations, its success is predominantly seen and experienced in the business or private sectors and is reflected in FM research which has little or no focus on broader advances in social and organisational science (Price, 2002). Typically, FM has been driven by the private sectors' focus on the strategic and operational dimensions and alignment of their policies through facilities and services, with the profits being the greatest measure of success (Alexander, 2003; Atkin & Brooks, 2005; Barrett & Baldry, 2003; Michell, 2012; Nutt & McLennan, 2000, (Smith, 2017). Melvin (1992) comments that it would be naïve to think that it would have transferred directly to government facilities as the government facilities have more complexities to consider with their interlinked and interdependent responsibilities which stretch beyond profit (Gordon, 1993, Johnson, 2019). Government facilities management is different in that it is required to evaluate multifaceted often opposing goals and must strike a delicate balance between succeeding in terms of financial performance (Brown, 2020) while still maintaining and serving public interest or public good (Adams, 2018, McShane, 2008; Michell, 2012).

Globally, governments are seen to have been more resistant to change (Jack, 1994) and as a result has seen increasing deterioration of community and government facilities (McShane, 2008). Governments are faced with the escalating effects of increasing structure costs, maturing asset portfolios, development pressures in urban regions and an increasing need to provide more services to local communities

(McShane, 2008). Government is further criticised for compounding these issues with their ineffective management of properties, lack of strategic planning, preoccupation with cost cutting and failing to impose structures necessary to maintain economic efficiency, service delivery and quality of life (McShane, 2008). In South Africa, these phenomena are exasperated by the political backdrop of the Apartheid regime which continue to be present in policies that are based on inequality and the division of people along racial lines (Michell, 2012; Parnell, 2002; Southall, 2004;). This has caused South African cities to be racially segregated in residential areas with lack of services to marginalised groups, a concentration of these marginalised groups on the city edge (Michell, 2012; Robinson, 2008) and unequal opportunities between different groups (Michell, 2012; Parnell, 2005). Despite a concerted effort at a national level of the post-apartheid government to alleviate poverty and develop infrastructure (Michell, 2012; Parnell, 2005), the number of informal settlements has grown (Huchzermeyer, 2006) and the desired growth and redistribution has not been realised. As government is the largest property portfolio holder in South Africa it plays a vital role in rebuilding local communities (Michell, 2012) and bears an enormous responsibility to the community. Namibian cities still mirror the vast majority of these issues of inequality caused by apartheid, being the second most unequal country in the world with a Gini coefficient of 59.1% (Thorn et al., 2023).

2.2.5 FM Performance Measurement

The success of facilities management is evaluated by an organisation's stakeholders using a wide range of performance criteria. FM is widely recognised for its potential to positively impact an organisation's performance in areas such as strategy, culture, resource control, service delivery, supply chain management, and managing change (Amaratunga & Baldry, 2003).

Measurement of performance is considered to be a crucial component for the successful implementation of facilities management, as noted by Alexander (1996). Despite this, many authors have noted the ongoing challenge of determining the most meaningful metrics and how to measure them accurately (Amaratunga & Baldry, 2003; Douglas, 1994; Hinks & McNay, 1999; Williams, 1999).

Furthermore, Amaratunga (2001, p. 165) highlighted that: *“Evaluation of performance measurement activities is often constrained by lack of understanding of causal links between performance measurement and performance improvement.”*

The financial objectives of government facilities differ from those in the private sector (Procurement executives' Association, 1998). Private sector financial goals typically represent well-defined long-term targets for profit-driven organisations operating in commercial environments (Amaratunga et al., 2001). On the other hand, the financial performance of government facilities should be evaluated based on their ability to meet the needs of their constituents effectively and efficiently (Amaratunga & Baldry, 2003).

Organisations face the challenge of creating a balanced performance measurement system that takes into account both financial and non-financial measures and is aligned with their overall strategy (Amaratunga & Baldry, 2003). The effectiveness of this system is largely dependent on the widespread understanding and acceptance of the organisation's strategy within the organisation (Amaratunga & Baldry, 2003). Sinclair and Zairi (1995) highlight the importance of performance measurement in enabling effective planning and control, managing change, communication, continuous improvement, resource allocation, motivation, and long-term focus. Neely (1999) notes that a consistent alignment between business strategy, organisational behaviour, and decision-making processes is crucial in realizing an organisation's strategy and can be reinforced through performance tracking methods (Amaratunga & Baldry, 2001).

However, it can be difficult to measure the impact of buildings on the emotions, attitudes, and behaviours of occupants (Loosemore & Hsin, 2001). The main KPIs used in FM are typically related to the costs of operating, maintaining, and running a facility, revenue generated, space management, environmental and safety issues (International Facilities Management Association, 1994; Leake & Stanley, 1994; Loosemore & Hsin, 2001; Tucker and Taylor, 1990). It is crucial that these KPIs support the organisation's business strategy and reflect what is important to its customers (Loosemore & Hsin, 2001).

In order for stakeholders in the government to fully understand and acknowledge the impact of FM, it is essential that a clear and scientifically backed performance

measurement system is in place to demonstrate the benefits of FM on the organisation (Pitt & Tucker, 2008).

2.2.6 A Behaviour Approach to FM

Fleming (2004, p. 35) argues that perceptions may be more important than reality; *“...the participants” perceptions of their environment are more relevant than the observations of non-participant observers.*” Furthermore, the views of occupants of the facility may be subject to heuristic bias. These unconscious biases are difficult to pinpoint because the subjects are unaware that they hold such biases. The judgements of the stakeholders can also be intentionally distorted by motivational considerations such as payoffs and penalties (Tversky & Kahneman, 1974). Folkes (1988) noted that the perception of performance in a facility can differ from the actual performance depending on the use and nature of profession. The way occupiers may interpret information and experience a facility are important considerations when occupiers’ perceptions form part of building performance measurement (Fleming, 2004).

Becker (1990) notes that occupiers are seldomly consulted in a formal capacity as part of building performance appraisals and the primary focus is financial investment management appraisal techniques. He continues by noting that the comparison of actual perceptions to models or expected views offers a foundation for the development of performance indicators that depart from the present paradigm of measurement.

To develop a meaningful understanding of how various stakeholders experience FM within their organisations, it is important to have an insight into how people’s perceptions are constructed as well as what their motivations are. This can be achieved by understanding the structure of the organisation in question, the role the subject plays within the organisation, the perceived risks and benefits (motivations) associated with the subject’s reporting and minimising the effects of these risks.

2.2.7 FM Benchmarking

In FM, benchmarking is a process of comparing the cost, quality, risk and speed of any FM processes or functions with those of other organisations or process with similar core attributes or finished products to the one being benchmarked to identify optimal procedure or industry best-practice with the goal to emulate those standards

(Adewunmi et al., 2017; Williams, 2000). Cooke (1996) concludes that there are four main types of benchmarking, namely: internal, competitive, non-competitive and best practice (Fleming, 2004, Hinton et al., 2000; Magd & Curry, 2003). In order to effectively utilize benchmarking, the benchmarking procedure should be applied to the specific processes that are invaluable to the success of the organisation (Massheder & Finch, 1998). These processes are the variables which if properly managed, shall have a direct impact on customer or user satisfaction and would lead organisation to increase prosperity (Massheder & Finch, 1998). Facility functions should be ranked and prioritised according to the level of severity that failure would have on the organisations' primary process (e.g., in terms of continuity) (Adewunmi et al., 2017, Atkin & Brooks, 2000, Tucker & Pitt 2009). Organisations have found it difficult to develop and implement a balanced performance measurement system which incorporates both financial and non-financial measures that are linked to their strategy (Amaratunga & Baldry, 2003). Vokurka and Flidnev (1995), as discussed in Hinks and McNay (1999), tackle the problem by taking into account both hard issues, which are financial quantitative measures, and soft issues, which are non-financial qualitative performance attributes. The combination of these issues results in a set of parameters that can be used to evaluate performance against critical success factors (Fleming, 2004). Hinks and McNay (1999) posit that the framework for assessment is comprehensive, encompassing both financial and non-financial data (Fleming, 2004).

Critical success factors (CSFs) are the known essential components necessary for business competitiveness. It is imperative that an organisations' leadership establishes the CSFs to guide the organisation towards successful benchmarking implementation. These CSFs represents a range of facilitators which, when implemented will increase the chance for successful benchmarking implementation and acceptance in the organisation (Adewunmi et al., 2017).

Consequently, FM, which consists of management processes and service processes, is capable of deriving advantage from the procedure. Benchmarking can only be successful if the performance gaps are identified, and the "best practice" processes are developed to address the performance gaps (Massheder & Finch, 1998). FM Benchmarking techniques have been found to be most successfully implemented in organisations where benchmarking is used throughout all the departments

(Massheder & Finch, 1998). The vast majority of people responsible for managing facilities in organisations have a poor understanding of benchmarking procedure and as a result, where it is used, it is not being used to its full potential (Massheder & Finch, 1998).

The main KPIs that have been derived for application in FM are predominantly related to the costs of operating and maintaining a facility, revenue generation, space management, environment, and safety issues (International Facilities Management Association, 1994; Leake and Stanley, 1994; Tucker & Taylor, 1990).

The benchmarking process is more complex in instances where key metrics are difficult to establish, for example, customer satisfaction (Spendolini, 1992). When applied correctly, benchmarking leads to efficient value management of facilities service provision (Wauters, 2005). Benchmarking implementation should lead to improved business process performance measures (i.e., hard, and soft measures), which in turn will enhance the company’s efficiency (Deros et al., 2006).

2.3 Key FM Theoretical Issues

A number of relevant theoretical issues were observed within the literature. The observed theoretical issues span over a variety of FM facets. The table below highlights the key concepts found in the literature and succinctly collates them.

Table 2.1 Key Theoretical Issues

Key Theoretical Issues	References
1. The FM profession is interdisciplinary and multi-faceted.	Drion et al. (2012); British Institute of Facilities Management (2014)
2. Effective FM implementation enables organisations to maximise the use of property/facilities.	Abera (2017)
3. FM Research is inclined to be largely focused on operational concepts.	Michell (2010)
4. Development of FM best practices is key to creating sustainable facility portfolio within government.	Galamba and Nielsen (2016)

5. Research indicates that government facilities FM is an under-researched field	McShane (2006)
6. Government FM is required to align operations within short-term political decisions and yearly budgets.	Persson and Bratt (2010); Olsson et al. (2015)
7. Private sector FM practices cannot simply be copied and replicated in government facilities because the public sector has more complexities to consider.	Melvin (1992); Gordon (1993)
8. The government facilities are multifaceted and must strike a balance between succeeding in terms of financial performance while still maintaining and serving public interest.	Michell (2012); McShane (2008)
9. FM benchmarking should be applied to those processes that are critical to the success of the organisation.	Joyce (1995)
10. FM benchmarking is more successful if benchmarking is also applied in all departments within an organisation.	Massheder & Finch (1998)
11. Perceptions of performance in a facility may vary from the actual performance.	Folkes (1988)
12. It is difficult to measure the impact buildings have on the emotions, attitudes, and behaviour of the occupiers.	Loosemore & Hsin (2001)
13. Globally the government facilities are seen to have been more resistant to change.	Jack (1994)

2.4 Chapter Summary

FM is the efficient and effective functioning and integration of a facility with people, space, and services to support the primary function of an organisation. It has a wide scope and interdisciplinary nature creating a multi-faceted profession. Effective implementation of FM strategy can enable organisations to maximise the use of property/facilities which in turn allows an organisation to focus on the core business operations and ultimately facilitates the accomplishment of organisational goals.

FM research predominantly focuses on operational concepts within FM and mainly operational FM is practiced in organisations. Strategic FM is paramount to executing comprehensive and effective FM solutions. In order to achieve a sustainable facility portfolio within the government, it is important to critically identify the roles of facility managers and develop best practices. Research indicates that FM within government facilities is an under-researched field. The primary focus of the research in the Southern African context has also been on private sector FM.

The main difference between the private sector and government FM is that government Facility Managers operate within political environments where they are required to meet targets and ambitions of political groups as well as operate within ethical codes and public administrative regulations and rules. Furthermore, government facility managers need to adjust their operations to align to the prospective short-term political decisions, within yearly budgets. Government facility management is also different in that it is required to evaluate multifaceted often opposing goals and must strike a delicate balance between succeeding in terms of financial performance while still maintaining and serving public interest or public good. Financial considerations within government facilities should therefore be measured by how effectively and efficiently they meet the needs of their constituencies. Government FM professionals are tasked with managing ageing facility portfolios that require extensive renovation or even replacement.

It has been noted that government facility managers can gain valuable insight from the private sector FM however it would be naïve to think that private sector FM procedures can simply be transferred directly to the government facilities as the government has more complexities to consider with their interlinked and interdependent responsibilities which stretch beyond profit.

In the case of FM benchmarking, the procedure should be applied to those processes that are critical to the success of the organisation. It has been noted that for benchmarking to work effectively, all departments within an organisation should implement benchmarking techniques.

It is notoriously difficult to measure the impact buildings have on the emotions, attitudes, and behaviour of the occupiers.

Globally, governments are seen to have been more resistant to change, and this has contributed to the slow development of the FM profession within government facilities.

The following chapter documents the research methodology employed in this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

As a first step, the literature review identified research that had already been conducted on FM broadly as well as specifically within the governments. The research was used to develop researchable suggestions, which are later tested using the qualitative approach. The research methodology section will extensively look at the approaches the researcher applied in order to answer the research question. The “research onion” by Saunders et al. (2009) served as a guide when determining the main sections and subsections that the research methodology is divided into. These sections include research philosophy; research approach; research strategy; research choices; time horizon; techniques and procedures. This chapter also includes the sampling technique, research ethics, validity, and reliability, and finally the conclusion.

3.2 Research Methodology

Qualitative research is noted to be humanistic or idealistic method of research (Pathak et al., 2013). Pathak et al. (2013), notes that it is used to understand the perspectives, beliefs, experiences, demeanour, and interactions of people and achieves this better than the quantitative approach, despite the quantitative approach being more reliable in that it is based on numbers and methods that can be replicated by other researchers who aim to find causal relationships, make generalisations and predictions. Qualitative researchers in contrast aim to illuminate, understand, and extrapolate to similar situations (Hoepfl, 1977, Golafshani, 2003). A qualitative approach is the chosen method for this research so as to make inductive conclusions. This research aims to highlight how FM is currently being implemented within the Namibian government in an attempt to highlight the FM experiences of the government facilities internal stakeholders and to identify what is working well and what needs improving.

3.3 Research Philosophy

This research aims to highlight how FM is currently being implemented within the Namibian government in an attempt to highlight the FM experiences of the government facilities internal stakeholders and to identify what is working well and what needs improving. A social constructivist research philosophy is adopted because it allows for an inductive approach for data collection which is applied for this research in that the

research question is geared at understanding the perceptions held by the stakeholders in government. The interpretivist research philosophy considers the stakeholders' perspectives as view of reality that is created through the stakeholders understanding of FM.

3.4 Research Approach

Saunders et al. (2009) introduced the "Research Onion" framework which is a model that provides a structured approach to understanding the different layers or stages involved in the research process. This framework outlines two main research approaches namely "deduction and induction" (Saunders et al., 2009). An explorative and inductive approach systematically geared toward maintaining openness was used, as the research aims to explore the current perceptions and develop an understanding of FM in government facilities in the Namibian government.

3.5 Research Strategy

In order to answer the research question, this research adopted a case study methodology using a single case study strategy. A case study gains an understanding of a research topic within its natural environment or context (Saunders et al., 2009). Because the implementation of FM in the Namibian government is not well researched or understood, this strategy is used in particular since the research question is exploratory in nature and using the case study strategy will build a rich understanding of FM in government facilities in the Namibian context. The use of a case study is deliberate (Yin, 1994) because the study aims to understand FM in the Namibian Government setting. The research question aims to understand the implementation of FM within government facilities specifically, therefore it is a case study methodology using a single case study focusing on government stakeholders. Yin (1994) notes that a single case study is a better choice and appropriate when the aim of the research is to understand a single group (for example FM in government).

The use of a case study methodology provides the opportunity to observe, explore and analyse how FM is currently being implemented within the Namibian government and to add to the existing knowledge base within the Namibian context. Using the case study methodology and in particular a single case study, allows for a more systematic and detailed observations than what is possible in multiple case studies (Yin, 2014).

The single case will use a single unit of analysis that is the individual (Yin, 1994) as the individuals or participants answers to each of the question posed to them, will be considered, and analysed. Yin (2014) notes that the most important sources of data for case study research is interviews and is believed to be the most appropriate means for data collection in this study, due to the lack of availability of information on FM in the Namibian Government. The unit of analysis for this research, which is the overarching role of FM within the context of Namibian Government Facilities. Government facilities, which encompass a wide range of public buildings, institutions, and infrastructure, constitute a critical component of any nation's infrastructure. These facilities serve as the backdrop for the delivery of essential public services, administrative functions, and civic engagement. The effective management of government facilities is paramount to ensuring the smooth operation of public services and the overall well-being of citizens. Within this context, FM assumes a pivotal role as it directly influences the functionality, efficiency, and sustainability of these facilities. And Namibia, as a sovereign nation, boasts a diverse portfolio of government facilities, including administrative offices, healthcare centres, educational institutions, law enforcement facilities, and more. The distinctive socio-economic, geographic, and demographic characteristics of Namibia necessitate a tailored approach to FM in government facilities. Understanding how FM is implemented and leveraged within the Namibian government context is crucial to addressing the specific challenges and opportunities associated with these facilities.

3.6 Research Ethics

Ethics clearance was received from The University of Cape Town's Engineering and Built Environment Faculty which may be found in Appendix A. Ethical considerations were considered and all interviewees consented to their participation in the research, copy of informed consent template may be found in Appendix B. The following ethical procedures were followed throughout the completion of this research study:

- There was no apparent legal objection to the nature or the method of research,
- The research did not compromise staff or students or the other responsibilities of the University,
- The stated objective was achieved, and the findings have a high degree of validity,
- Limitations and alternative interpretations were considered,

- The findings could be subject to peer review and publicly available,
- The researcher complied with the conventions of copyright and avoided any practice that would constitute plagiarism.

3.7 Research Design

A cross-sectional research design approach was chosen for the research due to a longitudinal approach being impractical given the timeframe constraint to complete the research. A cross-sectional study is a type of observational research that analyses data of variables collected at one given point in time across a sample population or a pre-defined subset (Smith & Firth, 2011). This study type is also known as cross-sectional analysis, transverse study, or prevalence study.

Interview questions were developed with the topic and research questions in mind. Open ended questions were asked in order to stimulate the dialogue. As mentioned in the data collection method, the interviews were semi-structured to allow for unplanned questions and information that will build on the conversation and provide deeper insights into the research problem. The interview questions asked about the experiences of internal facilities stakeholders with regards to how FM is implemented in government facilities. The questions also aim to find out what the internal stakeholders perceive to be FM implementation successes and shortcomings. The key focus areas of the interview questions are detailed in Table 3.1.

Table 3.1 Interview Questions

Area of Focus	Question
FM Profession	In your understanding, what is the role of a Facilities Manager ?
Operational FM	Is there a framework in place for how public sector FM should be executed?
	How do GRN yearly budgeting changes impact how facilities are managed?
Strategic FM	What informs the implementation of FM in public facility?

	What role do public facilities occupiers play in determining how FM is implemented?
FM Behavioural Approach	What is your view on how efficiently public sector FM is implemented?
FM Performance Measurement	How is FM performance in a public facility measured?
FM Benchmarking	Is FM performance in the public sector facility benchmarked ?
Recommendations	What recommendations would you suggest to improve public FM?

3.8 Techniques and Procedures

3.8.1 Data collection

For the purpose of this study, the in-depth interview method of data collection was utilised. The interviews were in-depth individual interviews and semi-structured to allow for flexibility and adaptability to discover any additional data, from the interviewees. A semi-structured interview comprises of prepared interview questions which are constructed using themes and asked using a systematic approach to maintain consistency but also allows for some interruptions where interviewees may be probed to elicit more detailed feedback (Qu & Dumay, 2011). The semi-structured interview was utilised because it is flexible and capable of disclosing important and often hidden facets of human and organisational behaviour (Qu & Dumay, 2011). Kvale and Brinkmann (2009) noted that this method is found to be very effective and the most convenient approach to gathering information. The questions were based on the key concepts uncovered from research summarised in Table 2.1 and the interview questions are outlined in Table 3.1.

This approach will allow the interviewee to provide insight beyond what is being asked and gives the researcher the possibility of unearthing unexpected and useful data. A disadvantage to this approach is that it requires the researcher to apply skilful interviewing techniques which are usually possessed by an interviewer with a wealth of practical experience (Doyle, 2018). Less experienced interviewers may have

difficulty extracting data of a high quality from participants (Doyle, 2018). The semi-structured interview approach also requires the interviewer to be well prepared and adept at the use of scheduled and unscheduled probes in order to provide the researcher with the means to draw out more complete narratives from the interviewees, expounding a particular topic (Doyle, 2018). To minimise the aforementioned disadvantages, a well-planned interview guide was developed and may be found in Appendix C.

Eleven participants were interviewed for this research who are considered career professionals within the government, in their respective fields. Each participant has knowledge and extensive practical experience with the management of Government Facilities in Namibia. For confidentiality purposes, each interviewee was randomly assigned an interviewee code from INT01 – INT11 and will be referred to by using interviewee code. A randomly selected interview transcript may be found in Appendix D. The table below provides a background profile for each of the participants:

Table 3.2 Interviewee Background Profiles

Anonymity Code:	Gender:	Position:	Government Institution
INT01	Male	Deputy Director	Khomas Regional Council
INT02	Male	Inspector	Ministry of Works & Transport
INT03	Male	Deputy Director	Ministry of Education, Arts and Culture
INT04	Male	Deputy Director	Ministry of Finance
INT05	Male	Administrative Officer	Ministry of Works & Transport
INT06	Male	Chief Inspector	Ministry of Education, Arts and Culture
INT07	Male	Deputy Director	Ministry of Works & Transport
INT08	Male	Director	Ministry of Works & Transport
INT09	Female	Deputy Director	Ministry of Works & Transport

INT10	Female		Ministry of Works & Transport
INT11	Male	Senior Inspector	Ministry of Education, Arts and Culture

All interviews were recorded with the consent of participants and extensive notes were also be taken by the interviewer. After the interviews, the recordings were transcribed for analysis purposes.

In line with Shensul et al. (1999, p. 141) suggestion, the quality of the interview was maintained by paying careful attention to the following three principles:

- (1) *maintaining the flow of the interviewee's story;*
- (2) *maintaining a positive relationship with the interviewee; and*
- (3) *avoiding interviewer bias.*

3.8.2 Data analysis

Qualitative data analysis seeks to reduce and make sense of vast amount of information so that impressions that shed light on research questions can emerge. Ensuring data analysis is explicitly described enhances the credibility of the findings.

3.8.2.1 Qualitative approach: Thematic analysis

For this study, the qualitative approach used thematic analysis. The thematic analysis approach was used with *NVivo 12 Pro Software Package* to analyse the interview transcripts. 160 Nodes were identified, clustered, and grouped. Four main themes emerged from the identified codes. The use of NVivo 12 Pro Software Package in qualitative research has numerous benefits, particularly in the thematic analysis approach. This software allows for an in-depth exploration of data while ensuring a comprehensive and traceable analytical process, thereby augmenting the credibility of the findings. The principles guiding the analysis are well established, including the transcription of interviews, immersion in data to gain a deeper understanding of the phenomena being studied, development of a coding system using NVivo 12 Pro, and formation of overarching categories and themes from the linked codes (Morse & Richards, 2002). The thematic analysis method is well-suited for the examination of

cross-sectional descriptive data, offering a means to capture multiple facets of the phenomena under investigation (Ritchie & Lewis, 2006).

3.8.3 Validity and Reliability

The concept of reliability and validity are critical elements in evaluating the quality and rigor of research. Reliability refers to the consistency and accuracy of results over time and their representation of the total population under study. A reliable research instrument is one whose results can be replicated under similar conditions (Joppe, 2000). In contrast, validity refers to the degree to which the research truly measures what it claims to measure.

In qualitative research, the concept of validity is often debated with some researchers arguing that the term is not applicable to their work. Instead, they use terms such as quality, rigor, and trustworthiness to describe the validity of their research (Davies & Dodd, 2002; Lincoln & Guba, 1985; Mishler, 2000; Seale, 1999; Stenbacka, 2001). Lincoln and Guba (1985) proposed the concept of trustworthiness in qualitative research which encompasses four dimensions: credibility, transferability, dependability, and confirmability. These dimensions serve as a framework for evaluating the validity and reliability of qualitative research. Lincoln and Guba (1985) states that: "Since there can be no validity without reliability, a demonstration of the former [validity] is sufficient to establish the latter [reliability]" (p.316).

Patton (2002) also emphasised that the researcher's ability and skill play a significant role in determining the reliability of qualitative research, which is a consequence of the validity in the study. Therefore, it is crucial for qualitative researchers to consider both reliability and validity in their research design and implementation to ensure the credibility and rigor of their findings.

3.8.4 Sampling

For this research study a sample size of eleven interview participants was used, where data analysis and collection occurred repeatedly until theoretical saturation was reached. Participants were interviewed and data was analysed to understand the themes and concepts (Low, 2019). Once interviewing additional participants continued to confirm what was already known and similar feedback was received from

interviewees, theoretical saturation was achieved (Low, 2019), and interviewing ceased at eleven interviews.

Purposive sampling will be used to select participants. Qualitative research most often uses “purposive”, rather than random, sampling strategies (Etikan et al., 2016). Purposive sampling strategies are designed to enhance understandings of selected individuals or group experience(s) or for developing theories and concepts (Etikan et al., 2016). The researcher will accomplish this goal by selecting subjects based on the following criteria; choosing “information rich” participants that provide the greatest insight into the research question and, diversifying the sample group by selecting participants from different government institutions.

3.8.5 Limitations

One limitation to the qualitative approach is that participants may not feel comfortable to fully disclose their experiences. Some of the professionals being interviewed may also feel that the information being questioned on is a part of their competitive advantage and may not want to reveal it. Another constraint is that participants may be untruthful when responding to interview questions. Confidentiality may be a reason for the lack of output from participants; however, the interviewer will reaffirm the guarantee that this will be maintained at all times.

The interviews will be conducted in English. Muliro (2009) mentions that ambiguities, which are inherent in human language, can be recognised in the analysis of the qualitative approach. These ambiguities are exasperated in the Namibian context in particular because although English is the official language, the English proficiency is low in amongst the Namibian populace and only a minority of people (3.4%) report it as the home language (Stell, 2021). One would need to be aware and conscious of these ambiguities and the potential lack of understanding due to proficiency in English throughout the research in order to avoid any unclear situations.

Muliro (2009) also makes a good point that the conclusion reached from a qualitative approach cannot be extended to a wider population with the same degree of certainty that a quantitative approach can. This research paper is aware of this limitation and will try its best to minimise it through the use of supporting literature.

3.9 Conclusion

The purpose of this chapter was achieved by using the “research onion” framework to determine the main sections and subsections that the research methodology is divided into. These sections include research philosophy; research approach; research strategy; research choices; time horizon; techniques and procedures. This chapter also includes the sampling technique, research ethics, validity, and reliability. The following chapter will present the findings, analysis, and discussion.

CHAPTER FOUR

RESEARCH FINDINGS, ANALYSIS AND DISCUSSIONS

4.1 Introduction

In this section of the research, the key findings gained in relation to the research questions will be presented. The main aim was to highlight how FM is currently being implemented within the Namibian government and to add to the existing knowledge base within the Namibian context. The findings were obtained from eleven semi-structured interviews with career professionals within the government. The thematic analysis approach was used with *NVivo 12 Pro* software package to analyse the interview transcripts. From the responses obtained from the interview participants, four main themes emerged from the identified codes. These are presented in sections below and discussed in more detail thereafter. A copy of the tree node structure, exported from NVivo may be found in Appendix E. Subsequently, a discussion and analysis of these findings were compared to the literature review to answer the researcher's five main objectives.

4.2 Emergent Theme 1: Scope of the FM Profession within the Namibian Government

In this emergent theme a number of sub-themes were identified. Each of these are discussed below.

4.2.1 Custodian of Government Infrastructure

The interviewees mainly link the facilities managers function to building structures and support roles relating to buildings. A custodian can be defined as a person who is responsible for taking care of or watches over or a protector of - a property or building or infrastructure. These custodian roles - the caretaker, the watcher, and the protector, are the consistent themes or understandings that emerge from the interviews. In the interviews these roles are what is used to describe what it means to be a facilities manager or what the role of a facilities manager is.

Both INT06 and INT07 specifically use the term "custodian". INT06 mentions that that a facilities manager is a custodian and INT07 says "A Facilities Manager is the overall custodian of infrastructure of state property to ensure that the condition of the facility

is looked after”. INT06 extensively lists various duties such as “see if there’s leakages”, “look at what are their needs” and “a building needs to be renovated” and concludes that “he will look at it and see...must be attended to...”. These descriptors expand the interviewee’s understanding of the role of the facilities manager and these roles speak to the definition of a custodian.

INT09 uses the term “takes care of”, INT10 similarly uses the phrase “caring for facility” and INT01 says “he is the caretaker”. All three interviewees use the word or a derivative of the “care” which can be likened with the definition of a custodian. INT03, INT04, INT07 and INT09 use the term “looks after” which is be interpreted as the care taking role of a custodian because term “looks after” is similar to “takes care of” and could be used interchangeably. This is illustrated by INT09, who in their explanation of the role of a facilities manager says that the facilities manager “look[s] after or take[s] care of the facility”. Here we see the connection between looking after and taking care when INT09 uses “or”. INT02 uses the term “looks at” and INT06 uses the term “see” in their description of the Facilities Manager’s duties which is similar to the term “looks after”. These terms “see”, “looks at” and “looks after” are suggestive of the care taking custodian role that a facilities managers play.

INT05 says that “the manager makes sure that it is in place” which is similar to INT01 who recurrently uses the term “make sure” which is also synonymous with responsibility a custodian would assume as a caretaker, as highlighted below:

“it’s to make sure the building is up to standard and also the regulations of the municipality, the City of Windhoek (COW) or in any other town, are abided by. You know cause whether it is pipes that need to be laid or electrical and so on, so it is to make sure that the building is habitable”.

Additionally, terms “looks after” used by INT03, INT04, INT07 and INT09 and “looks at” used by INT02 also give the sense that the facilities manager’s role is to oversee or watch that certain things are done, playing the “watcher role” that custodians fulfil. This is supported by INT11 says that a facilities manager is the “the overall person” and further supported by INT01 who said:

“...those things are supposed to be monitored by the facilities manager.... Which we would also say is the inspector.”

In the quote above, it is the word “monitored” as well as referring to the facilities manager as an “inspector”, supports this perception. Monitoring gives the sense that something needs to be watched or looked-out for by the facilities manager which is like the watcher role of a custodian.

Furthermore, these terms evoke the feeling that the facilities manager needs to protect, preserve, and safeguard buildings, facilities, and resources. This sense is gathered from the use of the terms “looks after”, “makes sure” and “takes care of” which again align to the description of the protector role that a custodian plays. This is best illustrated by INT07 that says, “ensure that the condition of the facility is looked after”. A number of interviewees also refer to regulations or standards in their descriptions. This further gives the sense of the protector role that custodians play. For example, INT01 said the facilities manager “make sure the building is up to standard” and INT03 said “the building safety so maintain safety and health regulations ensuring the habitability of the building.”. The noting of standards and regulations in the understanding of the role of the facilities manager highlights the protector role of custodians in that indicates that interviewees appreciate that standards and regulations offer guidance in maintaining safety and protecting facilities and connect that responsibility to the facility managers.

This understanding of the role of a facilities manager is astute and supported by academic views, for example that of Bröchner et al. (2019, p.371) who note that:

“Facility managers are at a central position to uphold the values within circular economy as custodians of the built environment and influencing material choice, use and reuse in an organisation.”

4.2.2 Maintenance of Facilities

Maintenance is commonly understood to be the role of fixing broken things and considered one of the supporting roles facilities managers fulfil (Cigolini et al., 2008). From the analysis of the interviews, maintenance is described and understood in this traditional or rudimentary sense and it features as a key understanding of the interviewees of what a facilities manager does, in that INT01, INT03, INT05, INT06, INT08 and INT10 all use the terms “maintenance” or “maintain” to describe what the role of a facilities manager is. In these interviews, the term maintains, or derivative thereof is used 127 times.

Others do not specifically use the words maintenance or maintain but they do describe activities which can be summed up to building maintenance, for example INT06 who said “you know a facilities manager he will go out and see if there’s leakages, see to it that those, if a building needs to be renovated, he will see to it, he will look at it and see what are those breakages or whatever issues must be attended to ...”. Additionally, terms “looks after” used by INT03, INT04, INT07, INT09 and INT11 conform to the idea that the facilities manager’s role is a maintenance role in the traditional sense, in that they “look after the upkeep of facilities” (INT03) and that it is limited to maintaining “the condition of the facility” (INT07) - that needs to be looked after, nothing beyond.

Cigolini et al. (2008) note that maintenance and FM is a complex process which should provide optimal service to the users of the facility thus providing a more sophisticated view of FM. This is more sophisticated in that it looks beyond the building and fixing problems and views the facility more strategically in that it can be optimised to influence the experience of the occupier. This view is interpreted to be the understanding of INT02 who said that facilities managers “make sure they are optimal performances”. INT10 also suggests a broader understanding of the FM role and the role of maintenance when they say, “to derive economic benefit from their facilities.”

4.2.3 Monitoring Role

Monitoring in the sense that the facilities manager observes and/or checks the status of facilities over a period of time appears as a minor theme of the understanding of the role of the facilities manager. The word monitor appears six times in the various answers provided by the interviewees.

Specifically in response to the first question, INT01 in the description of their understanding what the role of a facilities manager is, concluded in saying “So those things are supposed to be monitored by the facilities manager”. This answer directly calls out the monitoring role. In contrast INT06 and INT07 indirectly make reference to the monitoring role which facilities managers play. INT06 in their description says the following “and the state of the building, now they will look at it” and INT07 says “property to ensure that the condition of the facility is looked after”. Both refer to the facilities manager role to monitor or assess the status of the facilities which they are responsible for.

Furthermore, the monitoring role is inferred to be what interviewees think a facilities manager should do. This is inferred from the responses to the question “what would your recommendations be or what would you suggest improving public FM”. In these responses, it is noted that monitoring is ideally the role that interviewees think FM should fulfil, for example, INT02 says “People [Facility Managers] need to be held accountable, we need monitoring and accountability” and similarly INT04 says “So, the performance [of facilities] needs to be measured and monitored”.

Summary:

The understanding of the facilities manager role seems to be consistent across the interviewees. The Interviewees appear to have a rudimentary understanding of the practice and define the role largely as operational in nature, dealing with the physical environment and associated services. They fail to realise the strategic potential and how the facilities manager role should contribute to and support the strategic purpose of the organisation, making no reference for other forces shaping FM such as the facilities’ life-cycle challenges as well as larger social concerns such as sustainability.

4.3 Emergent theme 2: FM Practice and maturity in the Namibia Government

This theme speaks to the FM profession maturity or status within the Namibian Government context. This theme emerged from the thematic analysis of the response of the interviewees, and these are discussed below.

4.3.1 FM Framework in Namibian Governments

From the interviews held, majority of the interviewees confirmed that there is a framework in place or that there should be a framework but the overall sentiment around the framework was not particularly positive.

Interestingly, INT03, INT04 and INT11 note that the Ministry of Works is the custodian of the Framework. Thus, it is assumed that the Ministry of Works should coordinate efforts and provide a strategic plan for the management of facilities.

Only INT08 indicated definitively that there is no FM framework but that one is in development, whereas although INT01 and INT05 said that they are not aware of any

framework or that they have not seen an FM framework but there is a possibility that it exists or that it “should be in place”. Similarly, INT07 notes that it “probably exists” but that it is not implemented but further along contradicts this statement when he says “So, there is no framework or policy so uhm there is no uniformity in approach.”. From these responses, we get the sense that it is likely that there is a framework, but the obvious failure is the lack communication and implementation of the framework. This is specifically what INT01 notes the problem is, he said the following “You just hear there is the document but sending it to the relevant people to say this is what’s supposed to be done. So, it’s basically boils down to communication or exchange of information.” Since information is regarded as a key factor to ensuring adequate support and efficient building maintenance and operations (Pärn et al., 2017), it is inferred that due to the lack information/communication efforts are uncoordinated and do not follow best practice and that would ultimately result in ineffective management of facilities. This is not unique to this study. The inadequate amount of learning from the use and operation of facilities is found to be one of the challenges experienced by facilities managers (Jensen, 2009).

In contrast, INT02, INT03, INT04, INT06, INT09, INT10 AND INT11 all agree to some degree that there is some sort of framework in place. However, generally it is understood to be determined at micro-level, in that it is managed by individual ministries’ in house maintenance departments or local authorities (INT03; INT06; INT07; INT08 & INT09 & INT10). For example, INT02 said “It is decentralised” and INT07 said “There is no centralised body or uhm system which manages or coordinates the efforts. So, each Ministry, uhm they all manage the facilities as they wish! They would formulate their own strategy”. It is thus concluded to suggest that there is no holistic or comprehensive view of FM activities in government. Dealing with facilities at a micro-level may be myopic in that it may result in trends or common barriers being overlooked. If there is no conscious or deliberate alignment of the daily activities to coordinate FM’s efforts, it is likely that matters are dealt with inefficiently. It may also cause inconsistencies in approaches and failure to establish best practice which again may result in an ineffective approach. In addition, because we get the sense that FM is largely dealt with at a micro-level it is assumed that FM is managed with a short-term reactive perspective rather than a long-term strategic view.

Furthermore, it is the collective understanding that the framework is primarily a maintenance plan or provides guidelines in terms of maintenance (INT02, INT04, INT06, INT09 & INT10). INT09 who says, “A framework is there, in the sense that there is a guideline maintenance framework”, is an example of this sentiment. Because maintenance concerns the activities that need to occur on a daily basis and is largely operational it is assumed that the framework only deals with short term perspectives and is driven by cost savings rather than being focused on value adding and long-term strategies.

Summary:

Ideally, the framework should create a shared understanding to efficiently solve problems and managing facilities. This requires collaboration and support from various stakeholders when decisions are being made, as it provides a holistic and comprehensive view of the FM practices and procedures which in turn improves efficiency and accurateness of decision making. Lastly, it should be reviewed annually and reviewed from a long-term strategic view to drive continuous improvement of process and procedures and to ensure that methods used are still appropriate. This does not seem to be the case. Although it is likely that a framework exists, it does not seem that it is well communicated and thus it is poorly implemented. Furthermore, from these responses we gained the sense that there does not seem to be collaboration and support from the various stakeholders in relation to the framework and the management of facilities. Furthermore, the framework appears to be predominantly operational in nature dealing mainly with issues of maintenance and there seems to be an absence of the broader responsibilities of FM such as real estate development, short-term strategies and long-term strategies concerning building use and operation.

4.3.2 FM Implementation

INT11 is the only participant that definitively stated that strategy is dictated from a central or governing ministry (the Ministry of Works and Transport) and then implementation instructions are given to user ministries. INT06 says that the same governing ministry mentioned by INT11 is only responsible for allocating facilities to the user ministry and these user ministries would determine their needs and maintain the facilities. INT05 supports this notion in that they also note that maintenance is determined at a local authority or user ministry level and INT08 statement “they all

manage the facilities as they wish” is interpreted to further support this view. INT04 says that statistics are used to inform what the needs are. These needs prioritised, a strategy is developed, and this strategy informs how FM is implemented. Similarly, INT10 notes that there is an asset register that is used to determine what maintenance should occur and INT07 describes an inspection process which informs what maintenance ought to be prioritised, both suggesting that there is a process that exists which informs how facilities are managed. INT04, INT07 and INT10’s views suggest that FM is informed but it is unlike INT05, INT08 and INT11 in that their view is that FM is informed by a policy or process rather than a governing body.

In contrast INT03’s answer succinctly captures the opposing sentiments around implementation:

“Sorry to laugh, but it’s a very reactive process. We wait for a complaint and then we fix whatever was reported as faulty or damaged.”

INT03 further says that “Yeah, there is little strategy involved, currently there is no routine plan in action...” which is supported by INT08 who says that there is no framework in place and no broad uniform approach to FM. To further support that implementation is poorly informed, INT03 notes that although there is an inspections process, it is not followed and is supported by INT01, who mentions that there is an assessment process, which is assumed to be the same or similar to the inspection process, but it is not done consistently. Moreover, INT02 reports that implementation depends on what is available. They describe a reactive process which informs the implementation and is constrained by a small budget. INT07 view agrees in that they say, “a balance needs to be struck, and budget influences what is prioritised” suggesting that a preventative plan is not realistic because of the restrictive budget and that any preventative measures would be a “luxury”. This is further supported by INT09 who says that it is not possible to stick to a maintenance plan because they can only address emergencies, reiterating the reactive approach that is taken rather than a strategic one.

Summary:

Although FM in developing countries (such as Namibia) is a rapidly growing profession, it is still in its early stages of implementation (Sarpin et al., 2016). The interviews confirmed this to be the case. Although, there is some mention of

processes, strategies, and governing bodies, but it is inferred that the full scope of the FM profession is not fully implemented because all participants only refer to maintenance and make no mention of long-term strategies such as preventative plans, life-cycle challenges, or larger social concerns such as sustainability. Furthermore, the contracting perspectives is interpreted to further support the notion that the implementation of FM in Namibia is still largely in its initial stages of implementation, in that it still seems to be largely a reactive process.

4.3.3 Stakeholder Involvement in Implementation

The feedback received is generally in agreement and describe the same level of involvement of stakeholders in the management of facilities.

INT05 notes that the Ministry of Works would determine the standards and requirements for various facilities and INT06 notes that the Ministry of works would determine what is allocated but both INT05 and INT06 note that these roles would be informed by the user Ministry. This is generally the view of the interviewees, that Ministry of Works “authorise” or decide on a particular action, but it is based on the information received by the occupiers of the facilities.

The reporting function by the occupiers is discussed by INT01, INT02; INT03, INT04, INT06, INT09, INT10 and INT11. From the discussions it is clear that the main involvement of occupiers is to report to the Ministry of Works and Transport and the reports largely inform of issues regarding maintenance and things requiring immediate attention. This is largely a reactive process, where corrective maintenance is done but none is preventative. This seems to be supported by INT06 who notes that the occupiers cannot embark on major capital projects and INT09 agrees noting that no major renovations or repairs can be done by the occupiers but needs done through or with the approval of the Ministry of Works.

INT04 and INT11 both note that the users are custodians of the facilities with INT02 noting the lack of pride that the users take in executing this responsibility.

In contrast, INT08 the user ministries, they each have their own mandate or autonomy, to manage the building or asset as they see fit and this is somewhat supported by INT07 in that they say that the occupiers are key stakeholders and note their

responsibility to minimise wastage of resources, so they need to be included in the preventative maintenance plans.

4.3.4 Implementation of FM

The analysis of the responses to the question “What is your view on how efficiently public sector FM is implemented?” confirms that, FM in Government facilities is ineffectively implemented (INT01; INT02; INT04; INT05; INT06; INT07; INT08; INT09; INT10 & INT11) with a few of them noting that there is a need or room for improvement (INT03; INT06 & INT09).

INT01 noted that various stakeholders who are responsible for the execution of FM practices, particularly management, fail to do so, saying “And it’s from the management or leadership too, they don’t work, or there is a lack of supervision. They are also not supervising or even planning. So, the people are just not working, lack of proper planning”. INT02 similarly highlights the lack of supervision in that they call for the “need [for] monitoring” which infers that there is a deficiency.

Related to this is the lack or absence of accountability from various stakeholders (INT01 & INT02, INT07, INT08, INT09 & INT10) rendering the execution of FM ineffective. INT01, INT02 and INT09 all explicitly use the word accountability. INT01 holds the government responsible and attribute the lack of accountability to those whose job it is to maintain the facilities, whereas INT02 and INT09 attribute it to those that occupy the buildings as lacking accountability. Although they do not use the term accountability, INT07, INT08 and INT10 share these views. INT07 similar to INT09’s perspective fault the occupiers for the failure of execution by saying “Occupants do not take care of infrastructure belong to government, there is no regard for public infrastructure, infrastructure which is there for them! For their use!”. Both INT07 and INT02 further highlight the problematic attitudes towards Government property, INT07 notes the disregard people have for Government resources observing that “There is an “I don’t care attitude” and INT02 observing that “...there is no sense of pride, or ownership”.

INT08 and INT10 do not explicitly attribute the inefficiency to a particular party but they do note the sheer lack of maintenance, and both are quite extreme saying things like “Buildings are left to decay!” (INT10) and “Buildings are abandoned and not renovated” (INT08). These comments are particularly problematic because operations and

maintenance is not only a basic requirement of FM it is crucial phase because of its impacts on costs and the overall effectiveness of managing facilities. It is then not surprising that when INT03, IN05, INT06 and INT09 note that FM is ineffective, they all discuss the lack of resources and the difficulties that result in execution of maintenance plans or strategies, which results in only critical or urgent matters being addressed. Capacity or workforce limitations are also noted which similarly result in individuals needing to decide between competing priorities and issues taking long to be resolved.

Lastly, FM is noted to be inept by INT01, INT03 and INT04 because matters are dealt with in a reactive manner, failing to plan, anticipate needs or think more strategically.

Summary:

It is clear that FM is ineffectively implemented which results in resources that are wasted within a budget which is stretched as is. Reasons noted for the ineffectiveness are:

- Failure to execute duties and no monitoring or supervision
- Problematic Attitudes such as lack of accountability, disregard for government property and negligence
- Lack of resources: Inadequate budget, insufficient workforce, and competing priorities – only critical issues can be addressed; being able to attend to maintenance issues is considered a luxury & it takes a lengthy amount of time for maintenance issues to be resolved
- Lack of planning & no preventative maintenance plan

4.3.5 Performance Measurement

INT01 notes that there is no performance management, making the remark that they had previously noted that there is no framework so there cannot be any measurement as there is nothing to hold them accountable to. This is supported by INT04 who simply says that it is not being done and INT11 who says that its “not really in place”. These sentiments can be correlated to the ineffectiveness of FM noted earlier especially because performance measurement is noted to be one of the three key matters that must be implemented for the successful execution of FM (Alexander, 2013).

However, the contrasting majority view is that there is performance management that happens, but interviewees describe varying approaches in which performance management occurs. Williams (2006) outlines the three main components of FM performance management, which are physical performance of facilities e.g., structural integrity, maintainability and strength, functional performance e.g., matters relating to the occupiers of the building such as ergonomics and health and safety, and financial performance e.g., efficiency, expenses, and depreciation. INT02 describes performance measurement only in terms of physical performance, in that they describe that performance is measured by the number of buildings that are renovated and how well maintenance plans are executed and things like the number of job cards that have been attended to, over a period of time and the speed in which maintenance issues are responded to and resolved. Both INT03 and INT10 concur this view and similarly describe how the number of requests received vs requests addressed and how quickly a request was attended to is measured. INT07 and INT08 also describe performance management only measured on physical performance, in that they describe an inspection process which occurs annually on the portfolio of facilities where, the condition of the facilities is recorded as well as the maintenance requirements and this is reported. This report is then used to measure performance. INT09 also refers to annual inspections but notes that measurement is based on money spent, thus focuses on the financial performance. These measures described by INT02, INT03, INT07, INT08, INT09 and INT10 are not holistic because they only focus on one of the three main components of FM performance management (physical performance or financial performance) and neglect the other main components that exist and should be measured in FM. Furthermore, these measures are problematic because they are unrealistic and they fail to measure and hold individuals accountable for the quality of the outcomes in that INT07 says that this is used to measure performance but because resources are limited this is largely considered an adequate justification as to why something is not done, so no remedial action is taken when performance is not achieved.

On a positive note, it would appear that there is a process, in the performance measurement, which assesses progress made in achieving pre-determined goals which impact and are informed by strategic objectives. This is gathered from INT03 and INT07 who report that every department has a performance agreement in place

which outlines the expectations of various roles and how these will be measured, INT10 who makes reference to a performance management tool that is used and INT05 who affirms that performance measurement occurs and describes how facilities managers are measured against the annual plans which have certain targets that are informed by the strategy set by the Ministry of Works and Transport. Performance is thus a measurement of whether these targets have been met or not.

Summary:

Feedback is mixed. Some interviewees said that there was no performance measurement of FM (INT01; INT04; INT05) with INT05 expanding that although there is no performance measurement, but they do have "...strategic plans. And the strategic plans would set annual plans. These plans would have targets for the Facilities Manager and, they would measure themselves against these targets. They can see if these targets have been met.". Others said that performance is measured (INT02 & INT03) with INT03 explaining some of the measures "...measured according to requests received verses the number of requests addressed, and ...speed of response, so how quickly requests are addressed, so time received to resolved time.".

4.3.6 Benchmarking

Benchmarking in FM should be a systematic process of evaluation of services and facilities done continuously to identify best practice and continuous improvement (Sarkis, 2001). Based on the responses, there seems to be some benchmarking but the responses and views from the respondents are not consistent and do not correlate. This seems to indicate that if it is done, it is not done so consistently.

INT02 explains how buildings are rated and then benchmarked according to the management framework, which describes an internal process whereas INT08 agrees that benchmarking is done but notes how it is done between countries, mentioning Kenya, South Africa, and Botswana. INT08 also notes that it is done periodically and not continuously. INT01 notes that some benchmarking is done but it is limited to "technical" benchmarking and only when particular interventions are initiated. INT09 similarly notes that it is done but also that it is only done with regards to pricing and that it is done by consultants. INT05 say that it should it "should be done", assuming that the Ministry of Works and Transport does benchmarking at the very least internally, but this is presumed and not known for sure.

Opposing views are noted by INT03, INT04, INT07 and INT10. INT03 says simply that benchmarking is not done, commenting that it should be measured and determined how efficient buildings are, but that it is not done. INT04 said if performance is not being measured then it cannot be benchmarked. INT07 notes that there is a desire to benchmark, but it is not done. INT07 goes on to mention that there is a poor understanding of the purpose of benchmarking therefore it is not prioritised and finally INT10 said it used to be done, albeit not timeously, but it is no longer done.

Summary:

The feedback from interviewees is mixed, some interviewees said that there is no benchmarking done (INT03; INT04; INT07 & INT10) and in contrast INT02, INT05, INT08 and INT9 indicate that there is benchmarking against maintenance frameworks (INT02), against regions (INT05 & INT10) and in the past against countries (INT10).

4.4 Emergent theme 3: Maturity of FM Implementation

When assessing the maturity of FM implementation in Namibia, the following themes were identified which provides context to how mature the implementation of FM is in Namibian Government as well as the factors that impact of these barriers to FM in the Namibian context. These are discussed below.

4.4.1 Budgets

The lack of resources is the most significant barrier to FM implementation in the Namibian context. There are 38 negative references made that mention that lack of funds and resources, the persistently decreasing budgets and allocations, and the need for more money in order to effectively execute FM. INT04, INT08 and INT10 note that budgets are insufficient to appropriately ensure that facilities are well managed, INT04 further points out that every year less money is allocated for FM resulting in the progressive deterioration of buildings. INT02, INT03, INT05, INT06, INT07, INT09 support this view noting too that budgets year on year decrease; there are “massive” budget cuts and as a result buildings become more dilapidated. INT02 further notes that this creates a lot of pressure on maintenance departments to maintain buildings within the budgets that are allocated and INT09 particularly notes that this has a negative impact. INT05 and INT09 both note that only critical problems can be addressed, with no scope for major maintenance and INT06 and INT11 note that not all duties can be fulfilled due to the lack of money being allocated. The following

statement by INT07 captures this sentiment: “You could say we are compelled to strike a balance with what is crucial to maintain and what is an acceptable level of maintenance.”

INT01 notes a mismanagement of budgets, where delays in implementation of projects results in a rush to spend the money that has been allocated before the fiscal year end. Similarly, INT08 furthers this line of thought when they remark on how there is no alignment of the volume of facilities and the budget set aside for maintenance. Both INT08 and INT09 allude to similar sentiment of negligence in the budgeting process which INT01 notes, in that they observe how new buildings are constructed, increasing the number of buildings year on year but no forethought and provision made for the maintenance of these buildings.

4.4.2 Politics

A noteworthy sentiment that emerged is the political agenda that drives behaviours rather than best practice which creates a barrier to effective FM. INT10 notes the discordance between what should be done and political agendas saying “There are political interests that cause tension. There is technocratic expert advice but that is not always aligned with the political interests...” and INT08 supports this perspective saying “So, there’s conflict – what needs to be done vs political agendas”. This tension makes sense when we consider that although “Government” is often considered as a single rational entity who acts on behalf of the public, it is actually of a number of individual people who each hold their own views and objectives they are working towards and without a direct threat to the political agenda, there is little incentive to maintain existing infrastructure and as a result a general neglect of these facilities.

INT01 says “you know this bureaucracy at Ministry of Works” which creates an impression that the bureaucracy of the Ministry is well known and prevalent. Furthermore, the use of the word bureaucracy carries a particular negative connotation, alluding to the problematic systems which cause inefficiencies in government, thwarting what government sets out to do and the irrational way in which government organises the management of facilities. INT03 furthers this sentiment when saying “...in consultation with the Ministry of Works. They are typically very strongly involved.” This too carries negative connotations and relates to the bureaucracy in that it suggests a culture of strict adherence to policies and procedure

as well as elevated levels of “officialism” where the system lacks flexibility and initiative which slows down operations and makes communication difficult. INT11 repetitively speaks about the requirement to follow the rules and seek authority before action is taken, which further establishes the presence of the bureaucracy in the management of government facilities.

Furthermore, INT08 clearly highlights the political agenda when they say the following: “Government Politicians are more interested in opening ceremonies for new buildings instead of maintenance because ribbon cutting ceremonies are what makes the news not renovations & maintenance.”

A number of the interviewees discuss this political agenda where they highlight the demand for the constructing of new buildings rather than the maintenance of existing structures (INT05; INT06; INT08; INT10 & INT11) and INT01 alludes to the lack of transparency when they say “people having hidden agendas as to... I’m getting...you know...” The reference to the ribbon cutting ceremony demonstrates the profound symbolic meaning behind building new buildings and how these events are used to provide signals to voters of the strength of the power of the state's rule over the country and suggests why maintenance is not a priority. INT01; INT02; INT05; INT06; INT08; INT10 and INT11 all clearly note that the construction of new buildings is the priority which puts pressure on and overwhelms an already limited maintenance budget (INT01; INT04; INT05; INT08 & INT09) resulting in:

- only critical or emergency actions being taken (INT05; INT08),
- the further deterioration of existing buildings (INT04), and
- an overall failure of preventative maintenance (INT10).

Summary:

Government FM is multifaceted and there are opposing Government goals and objectives that need to be balanced. Government as a whole is constantly trying to strike a balance between their financial performance and serving the multitude of public interests that Government is mandated to address. Government priorities are still largely shaped by the legacy of apartheid with the primary focus to redress the social ills of apartheid that society still suffers from; this is one of the reasons that FM is not considered a high priority on the national agenda. There is intense competition for the limited financial resources between the various governmental ministries and

departments and this is one of the factors that causes FM budget cuts to occur each year. Government has an ageing fixed asset portfolio with increasing infrastructural upkeep costs. The Government property portfolio is also on the rise with new buildings being erected. There is a misalignment between FM budget allocations and the condition of the fixed assets. There is one budget allocated for both maintenance and renovations. There is a poor overview of the condition Government buildings and no centralised record keeping of the state and condition of each building. There is a lack of strategic planning when it comes to FM, and this is partly as a result of a poor understanding of the benefits of strategic FM. There is a preoccupation with cost cutting (budget cuts) as the primary strategy to decrease Government expenditure. There are competing objectives between elected Government officials and appointed Government officials (the so-called technocrats); the elected Government officials are seen to have short term plans that are in line with the election cycles whereas the appointed technocrats attempt to have a long-term view when considering FM execution plan of action. The politicians who are the policy makers have ambiguous roles and directives that results in irrational decision making. As a result, Government Facility managers have to adjust their operations to align to short-term politically motivated decisions. The technocrats within the Government find it challenging to motivate for FM to be prioritised because there are various other initiatives that can more easily secure votes. Bureaucracy and a rigidity in the Government processed has been identified as one of the obstacles of effective FM execution. The occupiers of the Government facilities are rarely consulted on a formal basis as part of a building performance appraisal.

4.4.3 Strategy and preventative maintenance

Another barrier that emerges is the lack of preventative management, clear planning, and strategy (INT03 & INT08). Although private entities routinely maintain their infrastructure, government facilities are notably and generally neglected. Evidence of neglect is apparent and easily highlighted in the condition and abandonment of government buildings in Namibia and a number of the interviewees note the deterioration and neglect of buildings. For example, INT05 says “you can see the level of deterioration but, you are only able to do emergency fixes” and INT08 says “...completely destroyed due to poor or no maintenance”.

Further on in the various interviews it becomes apparent that one of the causes of this degradation of facilities is the lack of strategy, for instance INT03 notes that “there is little strategy involved, currently there is no routine plan in action and not building inspections are carried out to ensure for fitness”. INT08 who says “I think there is no broad uniform strategy for all facilities. So, there is no framework or policy so uhm there is no uniformity in approach.” Although some interviewees allude to a strategy, it generally appears that it is not possible to implement or follow the maintenance plans due to budget or resourcing constraints as discussed and noted in 4.5. – “We cannot follow any strategies, there is a plan, like a strategy in the form of a maintenance plan to ensure maintenance of all buildings and so on, but so, with the limitations... the limitations in budget...” (INT09).

In addition to the lack of strategy and lack of preventative measures, the maintenance that does happen is typically reactive, in that there are numerous references to the heavy reliance on reports or complaints from users which inform where efforts are directed (INT02; INT03; INT04 & INT10) rather than proactively developing and implementing a strategy to manage these inevitabilities. To substantiate this observation, INT03 says “Sorry to laugh, but it’s a very reactive process. We wait for a complaint and then we fix whatever was reported as faulty or damaged”. When maintenance is reactive, there is wasted time and effort looking for the right solution and getting instructions, creating confusion around who should be doing what and when. In addition, reactive maintenance typically responds to emergency situations which occur at inopportune times resulting in a halting of operations. INT08 astutely notes that this results in *“a lot of wastage of state resources.”*

4.4.4 Priorities

It is evident that FM and maintenance are not a priority despite the Interviewees noting its importance. When maintenance is disregarded, it has several negative consequences for the operational effective and efficient use of the facility, and these are noted by the individuals interviewed. One consequence of deferring and neglecting maintenance is that it is wasteful because it creates backlogs which are typically more expensive as well as more disruptive. This is noted by INT08 when they say, “And as a result, there is a lot of wastage of state resources.”

This is not unique to the Namibian Government, but most organisations see maintenance as a financial burden and often only commit the bare minimum to ensure the continuation of operations. This attitude is noted in the government with less being allocated to maintenance each year (INT03; INT06 and INT07), INT03 says “the trend that year on year less resources are earmarked to maintenance and redirected to other resources.” As a result, prioritisation is practiced, this is noted from INT07, who says, “We’ve seen massive budget cuts, which force us to re-prioritise to ensure we do not exceed the budget that has been availed.” and is mentioned by a number of other interviewees too. Maintenance is limited to dealing with imminent issues and despite the desire to maintain and follow best practices, this is constricted, e.g., INT06 says the following:

“I don’t think that we could have done much when it comes to facilities maintenance because the money was... There were other priorities you know so we got money from government, but that money was not that you could say that, you know, you maintain, you could have maintained.”

An alternative understanding for the lack of prioritisation of maintenance, is that there is a mismanagement of budgets rather than a disregard for maintenance as a priority. INT01 explains how delays in implementation of projects results in an urgency to use the funds that have been allocated before the fiscal year end and results in non-priority projects being attended to rather than all projects being considered and the most appropriate being prioritised.

Furthermore, in a post-apartheid Namibia balancing the opposing demands of socio-economic justice and global integration is the reality faced by government, who adopted policies that called for austerity measures to manage budgets which included cuts to infrastructure maintenance budgets. The implementation of these neoliberal policies maintained the worst financial characteristics of apartheid while undermining the hope for economic growth. INT06 discusses this historical context at length and INT05 notes the following concerning priorities in relation to post-independent Namibia as a developing country:

“There are competing priorities in developing countries, you know? We have limited resources and competing priorities. Of course, we want to maintain and ensure that things are done, but that’s a luxury. There is so much that needs to

be done, and critical issues that occur and then maintenance seems like a luxury.”

4.4.5 Occupiers Abuse of infrastructure & facilities

The disregard of Government Facilities by their occupiers is noted to a problem. This is important sentiment in particular because good FM needs effective commitment at all levels of the organisation.

A number of interviewers note that occupiers simply do not care for property owned by government and exploit them by taking maximum value with little investment or due care beyond basic maintenance to ensure the continued use of the facility. Others note the intentional vandalism of the property due to the lack of care and pride. The general sentiment is that occupiers do not appreciate and value the facilities that they occupy and demonstrate a general lack of accountability and responsibility, with INT07 noting that this attitude is “prevalent” in the government facilities. INT02 and IN09 both suggest that this behaviour is as a result of the occupiers only being required to contribute extraordinarily little for the use of the building or facility and this in itself is insufficient to fund any maintenance which needs to be done. INT11 echoes this sentiment saying *“Hmm, but it is stupidity really. It is a property with a [lot] more value”*. INT09 further notes that there are no consequences to vandalism or poor maintenance as occupiers are not held liable for any damages which further exasperates the issues as the occupiers are not deterred from being irresponsible or acting negligently.

Although FM is not the sole responsibility of the facilities department, the custodians of maintenance are noted by INT01 to also have an attitude of disregard in terms of their jobs and the maintenance of buildings. They say the following:

“Yes, the people don’t work, they don’t do their work. So how must there be efficiency? People are just not working...And it’s from the management or leadership too, they don’t work, or there is a lack of supervision. They are also not supervising or even planning. So, the people are just not working, lack of proper planning”.

IN02 indirectly supports this idea when they in their recommendation for improvements say that “but they must be prideful in their work”, which suggests that people do not

take pride in their work and is considered here as another barrier for effective FM in the Government of Namibia.

Conclusion:

These barriers suggest a systemic failure to maintain and effectively manage existing government infrastructure.

4.5 Emergent theme 4: Towards improved FM strategy and implementation

The following sections is analysis of the responses that provided insights from the professionals in practice, on what could be done to improve FM in the Namibian context. The emergent themes are discussed below.

4.5.1 Better Planning and Strategy and Implementation

There is an overall sense that there needs to be better planning and strategic thinking involved in FM in Government institutions. INT01 says poor planning needs to be counteracted. This is the only direct suggestion for better planning. The other interviewees suggest better planning or more strategic thinking is required but do not say this explicitly. For example, INT06 says “Maintenance functions need to be streamlined and processes fine-tuned.” The word streamlined could be inferred to mean strategic planning in the sense that the government needs to focus on chosen outcomes and target strategies to achieve them to be more efficient. Similarly, INT03 also suggests better planning when they say, “it would improve things if proactive approach was taken with regards to maintenance scheduling.”. In this example the use of the work proactive is suggestive that planning may be required and to plan effectively there needs to be some sort of strategy. INT03 further suggests involving stakeholders which relates to strategy in the sense that stakeholders drive business strategies which is similar to INT08 suggestions where they speak about the various stakeholder roles and how they need to be aligned in various way which leans itself to a bigger picture view and suggestive of strategy that needs to be thought about. Furthermore, INT03 in particular advocates for the stakeholders’ needs to be considered to ensure that value is delivered. This suggestion speaks to strategic thinking in that good strategies should change depending on the stakeholder’s perspective and needs.

4.5.2 More Collaboration

To improve FM in Government, INT06, INT08 and INT09 call for better collaboration between departments or better “alignment” of efforts. This collaboration was suggested particularly in terms increasing efficiency and INT06 in particular goes into great detail to describe the process that they envision and how it would increase efficiencies and encourage knowledge sharing. INT03 adds to this line of thinking saying “...*feedback to stakeholders involved in the management of facilities, and a system to appraise and assess how maintenance is performing*”. INT10 also suggested collaboration but called for Government to collaborate with the private sector rather than internal collaboration. This suggestion is a strategy that has become an increasingly popular means to fund and maintain infrastructure.

4.5.3 More Education

Education and training are a common suggestion with INT02, INT06, INT07 and INT08 referencing or suggesting education or training as a way that FM can be improved. Education and training are suggested as a means to increase:

- understanding of the importance of FM (INT05, INT07 & INT08) with INT05 suggests that this should be the first thing that is taught say “My recommendations would be to start with getting a greater understanding from high level government officials of the importance of FM.”.
- the sense of accountability amongst occupiers and those responsible for maintenance (INT01; INT02; INT08; INT09), a sense of ownership with the understanding that if there is a sense of ownership it will be better maintained (INT07; INT08), and pride (INT01; INT02; INT08) to being employed by government and being responsible for maintenance but also a sense of pride in occupying government facilities.
- to learn about best practices and upskill employees responsible for FM which would then improve the understanding of why maintenance is important, instil a sense of pride and overall improve the standard FM because it is executed by following best practice (INT05).

4.5.4 More Resources & Funding

Given that the lack of financing and limited budgets is noted to be one of the biggest challenges impeding the success of FM in Government in the Namibian context, it is not surprising that additional resources and funding is a suggestion made by many of the interviewees. INT01; INT05 and INT07 suggest more resources/funds/money should be availed and that it is required for the effective maintenance of buildings. INT07 and INT11 particularly noting that the need for more investment in maintenance and prioritising maintenance rather than in building of new infrastructure which has been noted as a trend. Maintenance is significantly underfunded and budget reduction and cost cutting further exasperates the challenges faced with maintenance and this needs to be rectified. In addition to directly increasing funding and the prioritisation for maintenance, INT01, INT05 and INT10 also suggest for additional investment should be made in building capacity either through increased manpower (hiring more people to cope with the maintenance demands) and/or upskilling of those in maintenance departments (through formal education and/or training interventions to ensure more efficient execution of maintenance). Further “indirect” investment is called for in the form of infrastructures such as IT systems or maintenance systems that support maintenance of facilities better and more efficiently.

4.5.5 More Robust Reporting & Feedback Systems

Going back to the “basics” is called for by INT04 and being consistent is called for by INT07. Creating a robust reporting system is a suggestion made by INT01, INT02 with INT04 and INT06 echoing this sentiment and expanding on it by recommending that this information or these records should be documented, linked and accessible via an information technology system to enable better information sharing, benchmarking, and communication to drive better efficiencies. In this same vein, INT03 notes that better monitoring should be conducted through feedback systems so that issues can be prioritised better and that individuals can be held to account for the maintenance that is due. Furthermore, INT09 notes that these records or information is available but suggests that it should be improved upon, which could be interpreted to be supported by INT02 in that they recommend this reporting should be standardised across ministries.

4.5.6 Better Quality Assurance

Quality assurance is a sub-theme that emerges through the following discussions:

- Improvement of monitoring (INT03) and better records (INT09) could create more consistency (INT07) and result in better quality (INT03, INT07 & INT09),
- Implementation of benchmarking would result in learnings of best practices which would increase quality (INT05),
- Better educated individuals will ensure better quality (INT06; INT07 & INT10).

4.5.7 More Accountability

Increasing the accountability of users of facilities is another suggestion for improvement as the occupiers of the facilities are rarely consulted or held accountable on a formal basis as part of a building performance appraisal and subsequent maintenance plan. INT07 discussed the need for users or occupiers of facilities to be involved in the maintenance of facilities in conjunction with the Governments plans. Both INT03 and INT09 discussed the need for the improvement of feedback systems to stakeholders, with INT09 noting that better documentation and record maintenance would enable Government to hold users accountable and discourage vandalism. Furthermore, pride and accountability for those that are employed by government is a further suggestion made by INT01, INT02 and INT08. This was suggested with the logic that being held responsible for maintenance and doing work with a sense of pride would improve the overall maintenance that is done.

4.6 Reflection of findings in terms of the literature

4.6.1 Key Theoretical Issue 1: The FM profession is interdisciplinary and multi-faceted

The literature on the definition of FM concludes that FM includes many processes, activities, services, and facilities, and leverages off skills from a number of professions. Although the findings from the research seem to indicate a consistent understanding across the interviewees of what the FM profession entails, it does appear to be a rudimentary understanding of the practice and define the role largely as operational in nature, dealing with the physical environment and associated services. The interviewees generally fail to realise the strategic potential and how the facilities manager role should contribute to and support the strategic purpose of the organisation, making no reference for other forces shaping FM such as the facilities' life-cycle challenges as well as larger social concerns such as sustainability. This contrasts the literature. Although there is some mention of processes, strategies, and

governing bodies, it is inferred that the full scope of the FM profession is not fully implemented because all participants only refer to maintenance and make no mention of long-term strategies such as preventative plans, life-cycle challenges, or larger social concerns such as sustainability.

4.6.2 Key Theoretical Issue 2: Effective FM implementation enables organisations to maximise the use of property/facilities

While one clear definition of FM remains unestablished, the literature on FM demonstrates the significant impact of FM in the success of core business operations and realisation of operational goals is well established (Barrett, 2000; BRITISH INSTITUTE OF FACILITIES MANAGEMENT, 2014; Drion et al., 2012). Despite the immaturity of the FM practice in Namibia, it is clear from interviewees that they can appreciate that FM can maximise the use of properties and facilities because interviewees are very clear that the absence of FM and the ineffective implementation thereof, results in ineffective use of facilities and resources being wasted. Furthermore, interviewees call for better implementation of FM practices, benchmarking, and best practices as suggestions to create sustainability and maximise the use of properties. This supports notion found in the literature review that FM maximises the use of properties and facilities, that best practice is key to creating sustainability and that benchmarking should be done.

4.6.3 Key Theoretical Issue 3: FM Research is inclined to be largely focused on operational concepts

The understanding of the facilities manager role is consistently a rudimentary understanding of the practice and is defined largely as operational in nature, dealing with the physical environment and associated services. The interviewees do not explicitly define the strategic potential of FM nor how the facilities manager role should contribute to and support the strategic purpose of the organisation, making no reference for other forces shaping FM such as the facilities' life-cycle challenges as well as larger social concerns such as sustainability. This is reflective of the literature as studies on FM is largely focused on operational concepts. This focus on operational concepts is further noted because although FM in developing countries (such as Namibia) is a rapidly growing profession, it is still in its early stages of implementation (Sarpin, Yang, & Xia, 2016). The interviews confirmed this to be the case. Although, there is some mention of processes, strategies, and governing bodies, it is inferred

that the full scope of the FM profession is not fully implemented because all participants only refer to maintenance and make no mention of long-term strategies such as preventative plans, life-cycle challenges, or larger social concerns such as sustainability.

4.6.4 Key Theoretical Issue 4: Development of FM best practices is key to creating a sustainable facility portfolio within government facilities

According to the literature, benchmarking in FM should be a systematic process of evaluation of services and facilities done continuously to identify best practice and continuous improvement (Sarkis, 2001). Based on the responses, the research suggests that there seems to be some benchmarking but the responses and views from the respondents are not consistent and do not correlate. This seems to indicate that if it is done, it is not done so consistently. They do however support the idea that development of FM best practice is key to creating sustainable facility portfolio within government in that they call for implementation of benchmarking would result in learnings of best practices which would increase quality and sustainability of the government's facility portfolio.

4.6.5 Key Theoretical Issue 5: Research indicates that government FM is an under-researched field

Literature notes that FM within government facilities is largely under researched, and that benchmarking should be done. This is found to be the case in this study. Although there seems to be some benchmarking noted amongst some interviewees, there is no clear answer on whether benchmarking is done or not. It is thus assumed that if benchmarking is done, it is not done consistently. This supports the notion that there is no standard or point of reference against which things may be compared or assessed within government facilities. Furthermore, education and training are a common suggestion made by the interviewees, as a means to improving the FM practice. In particular the benefit noted is that learning about best practices and implementing benchmarking would improve the knowledge or understanding of the FM practice within government facilities. This suggestion made by the interviewees can be inferred to signify that FM within government facilities is not well understood, which is in line with the literature.

4.6.6 Key Theoretical Issue 6: Government FM is required to align operations within short-term political decisions and yearly budgets.

In a post-apartheid Namibia balancing the opposing demands of socio-economic justice and global integration is the reality faced by government, who adopted policies that called for austerity measures to manage budgets which included cuts to infrastructure maintenance budgets. Literature notes that FM within government facilities is multifaceted and there are opposing government goals and objectives that need to be balanced. This is seen in the research where interviewees note that government as a whole is constantly trying to strike a balance between their financial performance and serving the multitude of public interests that Government is mandated to address with priorities that are still largely shaped by the legacy of apartheid. With the strong competition for limited financial resources between the various governmental ministries and departments FM budgets are cut despite the further ageing fixed asset portfolio which increasingly demand for infrastructural upkeep. There is a preoccupation with cost cutting (budget cuts) as the primary strategy to decrease government expenditure and short-term plans that are in line with the election cycles whereas the appointed technocrats attempt to have a long-term view when considering FM execution plan of action. As a result, government FMs have to adjust their operations to align to short-term politically motivated decisions.

In addition to balancing the politics, the government facilities manager is also required to align operations with short term political decisions and yearly budgets. Maintenance is viewed as a financial burden and often government typically only commits the bare minimum to ensure the continuation of operations with less being allocated to maintenance each year, coupled with the mismanagement of budgets where the delay in implementation of projects results in an urgency to use the funds that have been allocated before the financial year end.

4.6.7 Key Theoretical Issue 7: Private sector FM practices cannot simply be copied and replicated in the government because the government has more complexities to consider.

Overall, the research indicates that there is systemic failure to maintain and effectively manage existing government infrastructure particularly when compared to the private sector. Both literature and the research note that governments as a whole are constantly trying to strike a balance between their financial performance and serving

the multitude of public interests that Government is mandated to address which the private sector is not necessarily required to prioritise. These complexities and multifaceted priorities have been noted in literature as a phenomenon which occurs particularly in governments and further notes the inability to replicate best practice from the private sector to the governments. Similarly, interviewees reference the various priorities which government struggles to juggle however in somewhat opposing view to the literature review, research calls for Government to collaborate, learn from and leverage the private sector and note that this strategy has become an increasingly popular means to fund and maintain infrastructure more effectively than Government has been able to.

4.6.8 Key Theoretical Issue 8: The government is multifaceted and must strike a balance between succeeding in terms of financial performance while still maintaining and serving public interest.

The literature on government and the conclusions derived from the research correlate in terms of the understanding that there is balancing of the opposing demands of socio-economic justice and financial performance that government needs to strike. The research indicates that Government adopted policies that called for austerity measures to manage budgets which included cuts to infrastructure maintenance budgets which often negate the goals and objectives of social-economic justice, however, note that government is constantly trying to strike a balance between these conflicting priorities. Literature similarly notes that FM within government facilities is multifaceted and there are opposing government goals and objectives that need to be balanced.

4.6.9 Key Theoretical Issue 9: FM benchmarking should be applied to those processes that are critical to the success of the organisation

The interviewees appreciate that learning about best practices and upskilling employees responsible for FM would then improve the understanding of why maintenance is important, instil a sense of pride and overall improve the success of FM and consequently the organisation. Although FM is not necessarily well implemented within government facilities, the appreciation that application of FM processes is key to the success of the organisation is in line with the literature which suggests that FM benchmarking should be applied to those processes that are critical to the success of the organisation.

4.6.10 Key Theoretical Issue 10: FM benchmarking is more successful if benchmarking is also applied in all departments within an organisation.

To improve FM in Government, the research calls for better collaboration between departments or better “alignment” of efforts. This collaboration was suggested particularly as a means to increasing efficiency. This is inferred to support the notion found in the literature that FM benchmarking is more successful if benchmarking is also applied in all departments within an organisation.

4.6.11 Key Theoretical Issue 11: Perceptions of performance in a facility may vary from the actual performance.

Overall, the research indicates that there is a poor overview of the condition government buildings and no centralised record keeping of the state and condition of each building, resulting in performance management difficulties. In addition, Politicians who are the policy makers have ambiguous roles and directives that result in irrational decision making which commonly results in the construction of new buildings which is viewed favourably although not necessarily the most effective and efficient use of funds. Subsequently, government FMs have to adjust their operations to align to short-term politically motivated decisions rather than in accordance with performance measurement targets. Furthermore, it is not always clear that there are performance criteria set, benchmarking or maintenance frameworks. These results all support literature that perceptions of performance vary from actual performance.

4.6.12 Key Theoretical Issue 12: It is difficult to measure the impact buildings have on the emotions, attitudes, and behaviour of the occupiers.

Although the overall sentiment towards the occupiers is negative, there is no direct measurement of the impact that buildings have on occupier behaviours. This supports the literature which holds that it is difficult to measure the impact that building have on occupancy behaviours. It is indirectly concluded from the research that the general poor condition of government buildings, results in negative behaviours. Although this is not directly established, based on the feedback from the interviewees, it is clearly noted that poor monitoring systems, lack of resources and limited involvement of occupiers, results in negative behaviours such as a lack of accountability, disregard

for government property, vandalism, abuse, neglect as well as failure to execute duties.

4.6.13 Key Concept 13: Globally government are seen to have been more resistant to change.

Feedback from the research notes that there are competing objectives between elected Government officials and appointed Government officials (the so-called technocrats). The elected Government officials are seen to have short term plans that are in line with the election cycles whereas the appointed technocrats attempt to have a long-term view when considering FM execution plan of action. The politicians who are the policy makers have ambiguous roles and directives that results in irrational decision making. As a result, Government Facility managers have to adjust their operations to align to short-term politically motivated decisions. The technocrats within the Government find it challenging to motivate for FM to be prioritised because there are various other initiatives that can more easily secure votes. Bureaucracy and a rigidity in the Government processed has been identified as one of the stumbling blocks of effective FM execution, illustrating the resistance to change as noted in and in support of the literature.

4.7 Chapter Summary

The understanding of the facilities manager role seems to be consistent across the interviewees. The Interviewees appear to have a rudimentary understanding of the practice and define the role largely as operational in nature, dealing with the physical environment and associated services. They fail to realise the strategic potential and how the facilities manager role should contribute to and support the strategic purpose of the organisation, making no reference for other forces shaping FM such as the facilities' life-cycle challenges as well as larger social concerns such as sustainability.

Although FM is a rapidly growing profession in Namibia, the profession is still in its infancy, and it is clear that is currently being ineffectively implemented. FM in Namibia is characterised by a lack strategy and consistency across authorities, poor communication, limited collaboration, and inadequate support both in financial and non-financial resources. Furthermore, FM appears to be predominantly operational in nature dealing mainly with issues of maintenance and there seems to be an absence of the broader responsibilities of FM such as real estate development, short-term

strategies and long-term strategies concerning building use and operation. The analysis of the results identified the following barriers to effective FM namely, lack of funding and resources; lack of strategic plans, including preventative maintenance plans; competing priorities, in particular political agendas that do not align to best practices; poor or no performance management; and poor or no benchmarking.

The next chapter draws conclusions and makes recommendations for further research.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The research intended to understand how FM is being implemented currently within the Namibian government with the goal to add to the existing knowledge base within the Namibian context. This concluding chapter offers a review of the research objectives, research aims and research questions as well as the research intention. It finally makes recommendations that will help with the implementation of FM in the Namibian government, followed by the conclusion and lessons learnt.

5.2 Revisiting the research objectives

The researcher is pleased to note that the objectives of the study have successfully been met. The findings as per the key objectives of the research are detailed below:

a. Main Objective: To highlight to what extent internal stakeholders of government facilities find the current FM processes to be effective.

Facilities it is still in its early stages of implementation in Namibia and is consistently noted to be ineffectively implemented which results in resources that are wasted within a budget which is stretched as is. Although, there is some mention of processes, strategies, and governing bodies, but it is inferred that the full scope of the FM profession is not fully implemented because all participants only refer to maintenance and make no mention of long-term strategies such as preventative plans, life-cycle challenges, or larger social concerns such as sustainability. Furthermore, the contracting perspectives is interpreted to further support the notion that the implementation of FM in Namibia is still largely in its early stages of implementation, in that it still seems to be largely a reactive process.

b. Secondary Objective 1: • To ascertain the factors influencing the practices of FM within government facilities.

Ideally, the framework should create a shared understanding to efficiently solve problems and managing facilities. This requires collaboration and support from various stakeholders when decisions are being made, as it provides a holistic

and comprehensive view of the FM practices and procedures which in turn improves efficiency and accurateness of decision making. Lastly, it should be reviewed annually and reviewed from a long-term strategic view to drive continuous improvement of process and procedures and to ensure that methods used are still appropriate. This does not seem to be the case in Namibia. Although it is likely that a framework exists, it does not seem that it is well communicated and thus it is poorly implemented. Furthermore, from these responses we gained the sense that there does not seem to be collaboration and support from the various stakeholders in relation to the framework and the management of facilities. Furthermore, the framework appears to be predominantly operational in nature dealing mainly with issues of maintenance and there seems to be an absence of the broader responsibilities of FM such as real estate development, short-term strategies and long-term strategies concerning building use and operation.

c. Secondary Objective 2: • To highlight determine the extent to which current FM philosophies & best practices are being implemented in government facilities.

Benchmarking in FM should be a systematic process of evaluation of services and facilities done continuously to identify best practice and continuous improvement Sarkis (2001). Based on the responses, there seems to be some benchmarking but the responses and views from the respondents are not consistent and do not correlate. This seems to indicate that if it is done, it is not done so consistently.

d. Secondary Objective 3: To understand the role that facilities occupiers play in determining how FM is carried out in government facilities.

There is a level of involvement of stakeholders in the management of facilities.

It is clear that the main involvement of occupiers is to report to the Ministry of Works and Transport and the reports largely inform of issues regarding maintenance and things requiring immediate attention. This is largely a reactive process, where corrective maintenance is done but little to none is preventative. It is understood that occupiers cannot embark on major capital projects or major

renovations or repairs but needs done through or with the approval of the Ministry of Works.

The users or occupiers are deemed to be the custodians of the facilities but there is a note that they lack pride and accountability in executing this responsibility even though they are noted to be key stakeholders.

e. Secondary Objective 4: 1. To examine variations in the management approaches employed across similar government facilities.

Either the Ministry of Works or the user ministry would determine the standards and requirements for various facilities and allocates resources, with the general sense that Ministry of Works “authorises” or decides on a particular action, but it is based on the information received by the occupiers of the facilities.

5.3 Revisiting the research question

The purpose of this study was to highlight how FM is currently being implemented within the Namibian government to add to the existing knowledge base within the Namibian context. This was the focus of the research because there is limited amount of research that has been conducted regarding FM within Namibia. The lack of scientific research available on FM has led to the profession not being widely viewed as a necessary and beneficial tool for the more efficient management of facilities in Namibia.

The study endeavoured to answer the following research questions:

The primary research question was:

- What are the current perceptions of the internal stakeholders of government facilities regarding the implementation of the current FM strategies?”

In addition, this research explored the following sub-questions:

- What informs how the government facilities are managed?
- To what extent are the current FM philosophies & best practices being implemented in government facilities?
- What role do the facilities occupiers play in determining how FM is carried out in government facilities?

The aim of this research has been accomplished and the research questions have been answered. The key findings indicate that FM management in Namibia is quite immature. There are a number of factors have been identified that cause the inefficient implementation of FM in Government in Namibia. Because FM is still developing in the Namibian context and the implementation thereof is seen to be inefficient and ineffective, there is significant room improvement. The findings show that there is room for growth and great potential to better manage facilities, but it will require a substantial investment in both financial terms and in the upskilling of human capital. The findings suggest that government does not have strategies in place for forward planning or preventative maintenance to help future FM and overall, there is systemic failure to maintain and effectively manage existing government infrastructure. Although the outlook is quite negative, there are numerous suggestions made on how to improve.

5.4 Conclusion

In conclusion, this research has shed light on the current state of FM implementation within the Namibian government and has addressed the research objectives and questions set forth at the beginning of this study.

Firstly, it was found that the implementation of FM in Namibia is still in its early stages, primarily focusing on reactive maintenance rather than comprehensive, long-term strategies. The absence of preventative plans and a broader understanding of FM's scope highlights a need for more robust and holistic approaches.

Secondly, the study revealed that there is limited collaboration and communication among stakeholders in the FM framework. A well-structured and well-communicated framework is essential for efficient decision-making and problem-solving. The current lack of such coordination poses challenges to the effective implementation of FM practices.

Thirdly, benchmarking, a key component of FM best practices, is not consistently practiced in Namibian government facilities. This inconsistency implies a need for more systematic evaluation and continuous improvement efforts within the FM sector.

Fourthly, the role of facilities occupiers was examined, revealing a predominantly reactive approach, with occupiers mainly reporting maintenance issues. The lack of preventative measures and occupiers' perceived lack of pride and accountability indicate a need for enhanced occupier engagement and education.

Lastly, the study explored variations in how similar government facilities are managed. It was noted that standards and resource allocation are determined by either the Ministry of Works or the user ministry, emphasizing the importance of clear guidelines and consistent decision-making processes.

In conclusion, this study contributes valuable insights to the field of FM in the Namibian context and serves as a foundation for future research and actions aimed at optimizing government facility management.

5.5 Recommendations

This research has identified significant challenges in the current implementation of FM within the Namibian government. However, it also highlights opportunities for improvement. The findings underscore the need for increased investment in both financial and human capital to advance FM practices. These include the development of comprehensive FM strategies, enhanced stakeholder collaboration, and a greater emphasis on preventative maintenance. These improvements, if implemented, have the potential to significantly enhance the efficiency and effectiveness of facility management in Namibia. The following six key suggestions for improvement were identified by the interviewees:

- Implementation of strategic plans
There is an overall sense that there needs to be better planning and strategic thinking involved in FM in Government institutions to enhance collaboration which should increase efficiencies and create better alignment to goals.
- Education and training are suggested as a means to increase:
 - understanding of the importance of FM
 - the sense of accountability amongst occupiers and those responsible for maintenance, a sense of ownership with the understanding that if there is a sense of ownership it will be better maintained, and pride to being employed by government and being responsible for maintenance but also a sense of pride in occupying government facilities.

- to learn about best practices and upskill employees responsible for FM which would then improve the understanding of why maintenance is important, instil a sense of pride and overall improve the standard FM because it is executed by following best practice.
- Increased funding and resource allocation
More financial resources should be allocated to FM as well as additional investment should be made in building capacity either through increased workforce (hiring more people) and/or upskilling of those in maintenance departments (through formal education and/or training interventions).
- Enhanced reporting and feedback systems
Records should be maintained, linked and accessible via an information technology system to enable better information sharing, benchmarking, feedback, and communication to drive better efficiencies and quality assurance.
- More accountability
Increasing the accountability of users of facilities is another suggestion for improvement as the occupiers of the facilities are rarely consulted or held accountable on a formal basis as part of a building performance appraisal and subsequent maintenance plan.

The suggestions provided by interviewees, are summarised, and categorised under the three themes, namely: research, industry and government.

5.5.1 Research

The current research focused on building better understanding of how FM is currently being executed within the Namibian government to add to the existing knowledge base within the Namibian context. It is thus recommended that future research studies focus on investigating successful FM within the Namibian government. This would be helpful to understand the main success factors that contribute to the successful implementation of FM within government facilities as replication of best practice from the private sector has been reported to be difficult because of the multifaceted complexities that are realities within governments that are not necessarily factors within the private sector.

In addition, another in-depth exploration is required into the factors identified that lead to the ineffective and inefficient implementation of FM in government and ways to

mitigate these factors. In particular, further research could benchmark and develop insights from other developing countries; to build and grow the support available for countries like Namibia to improve FM as it is generally noted that studies of this nature are limited thus the research will improve the current literature review.

5.5.2 Industry

Since the FM is still developing in Namibia, it is recommended that regular best practice consultations, benchmarking and training workshops be held to educate both the private sector (the built environment professionals such as FM and relevant stakeholders) and the government (politicians, government officials and employees) to:

- increase the understanding of what FM is and the importance of FM.
- improve the sense of accountability amongst occupiers and those responsible for maintenance.
- instil a sense of ownership and pride with the reasoning that if there is a sense of ownership and pride in the facilities, government facilities will be better maintained.
- teach best practices and upskill employees and occupiers responsible for FM which would then improve the understanding of why maintenance is important, instil a sense of pride and overall improve the standard FM because it is executed by following best practice with the hope that this will promote accountability as well as encourage the parties to cooperate with each other.

5.5.3 Government

Because there is a systemic failure to maintain and effectively manage existing government infrastructure partially due to lack of strategy and guidance, it is therefore recommended that the central government support the local authorities across the country by providing:

- Holistic Strategy for Government FM to ensure that priorities are clear and aligned across local authorities and ministries and discourage alternative agendas and implementation of non-priority projects.

- Clear frameworks, guidance, and standards for FM for government facilities. This will standardise practices, clarify expectations and align priorities. This will also allow for individuals to be effectively performance managed to be held accountable for what they are responsible for as well as monitor occupancy behaviour to discourage abuse and negligent behaviour.
- More funding towards FM and in particular for maintenance. This should allow better prioritisation of maintenance to better manage the property portfolio of the Government.
- Investment in ITC and support infrastructures. This is to encourage better information management, reporting and feedback.
- Encourage participation from the private sector, through the promotion of PPP agreements for development and maintenance of buildings. Collaboration of Government and the private sector rather than sole dependency on government to deliver is a strategy that has become an increasingly popular means to fund and maintain infrastructure.

5.6 Future Studies

Further future studies in FM within the Namibian government context is essential for advancing the understanding and implementation of FM practices. One critical recommendation is to investigate how the central government can better support local authorities across the country to address the systemic failure in maintaining and effectively managing existing government infrastructure. Future studies could focus on:

Centralized vs. Decentralized FM Practices: A comprehensive study could delve into the current division of responsibilities between the central government and local authorities concerning FM. Assessing the advantages and disadvantages of centralized versus decentralized FM practices would provide insights into the most efficient and effective approach for Namibia. This research could analyse the allocation of resources, decision-making processes, and the impact on infrastructure maintenance.

Policy and Regulatory Frameworks: Research could focus on the development and implementation of FM-related policies and regulations at both the national and local

levels. Investigating the extent to which existing policies support or hinder FM efforts, and identifying gaps in regulatory frameworks, can guide the formulation of more effective policies. Moreover, exploring the enforcement mechanisms and compliance rates could shed light on the role of government in ensuring adherence to FM standards.

Capacity Building and Training: An in-depth study on the capacity building and training programs available to local authorities and government officials responsible for FM could be beneficial. Analysing the adequacy, accessibility, and effectiveness of these programs can highlight areas for improvement. Additionally, assessing the impact of training on FM practices and infrastructure management would provide valuable data.

Resource Allocation and Budgeting: Investigate how financial resources are allocated for FM within local authorities and how budgeting decisions are made. Research could assess whether there is a need for greater financial support from the central government and how these funds could be optimally utilized for infrastructure maintenance. Analysing budget allocation trends over time can provide insights into the prioritization of FM in government expenditure.

Stakeholder Engagement: Explore the extent of stakeholder engagement in FM decision-making processes, especially at the local level. Assess whether there are mechanisms for involving the community, civil society organizations, and other relevant stakeholders in the management of government facilities. Investigate the impact of increased stakeholder participation on infrastructure maintenance and sustainability.

International Best Practices: Comparative studies that examine the FM practices and experiences of other countries with similar infrastructure challenges can offer valuable insights. Identifying successful international best practices and adapting them to the Namibian context could provide practical solutions for improving FM.

Technological Solutions: Investigate the potential role of technology, such as Computerized Maintenance Management Systems or Building Information Modelling, in enhancing FM practices within the Namibian government. Research could focus on the feasibility, costs, and benefits of implementing such technologies and their impact on infrastructure management.

Long-Term Sustainability: Assess the environmental and sustainability aspects of FM within the Namibian government context. Explore the incorporation of green building principles, energy efficiency measures, and sustainable infrastructure management practices. Investigate the potential cost savings and environmental benefits of adopting sustainable FM practices.

In conclusion, future studies in Facility Management within the Namibian government context should aim to address the systemic issues hindering effective infrastructure management. Investigating the relationship between the central government and local authorities, the development of policies and regulations, capacity building efforts, resource allocation, stakeholder engagement, international best practices, technological solutions, and sustainability considerations can collectively contribute to a more comprehensive understanding of FM and guide improvements in infrastructure management across the country.

5.7 Limitations

These limitations and constraints should be considered when planning and conducting future research in FM within the Namibian government context, and researchers should develop strategies to address them effectively.

Data Accessibility and Transparency: Interviews had little or no line of sight to policies or documents. Therefore, it is assumed that there will be limited access to government records and data, especially concerning budgetary information and policy documents, which may impede comprehensive research.

Training Impact Assessment: Evaluating the long-term impact of capacity-building and training programs on FM practices may require extended timeframes, potentially prolonging the research process.

Resource Allocation Challenges: Constraints related to data availability and transparency may hinder in-depth analysis of financial resource allocation for FM. Economic factors which is noted by interviewees will most likely also limit government financial support.

Stakeholder Engagement: Challenges may arise in gaining access to diverse stakeholder groups due to privacy concerns and reluctance to share information, potentially limiting the depth of engagement analysis.

Data Quality and Comparability: Comparative studies on international best practices may face issues related to variations in data quality and comparability across countries.

Technology Infrastructure: Limited technology infrastructure in certain regions of Namibia may affect the feasibility of implementing advanced technological solutions for FM.

Sustainability Data Availability: Availability of data on environmental impact and sustainability practices may be limited, and financial constraints may impact the implementation of sustainable initiatives.

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APPENDICES

Appendix A: Ethics Clearance

Application for Approval of Ethics in Research (EIR) Projects
Faculty of Engineering and the Built Environment, University of Cape Town

ETHICS APPLICATION FORM

Please Note:

Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form **before** collecting or analysing data. The objective of submitting this application *prior* to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the EBE Ethics in Research Handbook (available from the UCT EBE, Research Ethics website) prior to completing this application form: <http://www.ebe.uct.ac.za/ebe/research/ethics1>

APPLICANT'S DETAILS		
Name of principal researcher, student or external applicant	Fulata Zimba	
Department	Construction Economics and Management	
Preferred email address of applicant:	fulatazimba@gmail.com	
If Student	Your Degree: e.g., MSc, PhD, etc.	
	Credit Value of Research: e.g., 60/120/180/360 etc.	60
	Name of Supervisor (if supervised):	Prof. Kathy Michell
If this is a research contract, indicate the source of funding/sponsorship	INVESTIGATING THE EFFECTIVENESS OF FACILITIES MANAGEMENT STRATEGIES IMPLEMENTATION WITHIN THE NAMIBIAN LOCAL GOVERNMENT	
Project Title		

I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- the findings could be subject to peer review and publicly available; and
- I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

APPLICATION BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	Fulata Zimba		31/08/2020
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)	Prof. Kathy Michell		2/09/2020

APPROVED BY	Full name	Signature	Date
HOU (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).	Louie van Schalkwyk		30 Nov 2020
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the questions in Section 1.	Louie van Schalkwyk		30 Nov 2020



REPUBLIC OF NAMIBIA

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Rondebosch
7701

Attention: Kathy Michel

SUBJECT: APPROVAL TO INVESTIGATE THE IMPACT OF FACILITIES MANAGEMENT PRACTICES ON GOVERNMENT PROPERTY ASSETS AND INTERNAL STAKEHOLDERS

Receipt of your letter dated 24 August 2020 is hereby acknowledged. This letter serves to inform you that permission has been granted to allow Mr Fulata Zimba to access the Department of Works within this Ministry to conduct research interviews on the above subject. Please take note that the ministry would be pleased if you can share the research findings.

Please do not hesitate to contact this Ministry if you require further additional information.

18.11.2020
Esther N. Kaapanda
EXECUTIVE DIRECTOR



"Effective and Efficient Delivery of Services"

All official correspondence must be addressed to the Executive Director

Appendix B: Copy of Informed Consent Template



INTERVIEWEE CONSENT FORM

UNIVERSITY OF CAPE TOWN

CONSENT TO PARTICIPATE IN A RESEARCH

Research Title: AN INVESTIGATION INTO THE IMPACT OF FACILITIES MANAGEMENT STRATEGY IMPLEMENTATION WITHIN THE NAMIBIAN LOCAL GOVERNMENT

Dear potential participant;

You are invited to participate in a research study conducted by Mr. Fulata Zimba, a Master of Science in Property Studies student at the University of Cape Town. The research is supervised by Associate Professor Kathy Michell of the University of Cape Town and the results of the study will be presented to the Department of Construction Economics and Management in fulfillment of the requirements for the degree of Master of Science in Property Studies in Construction Economics and Management.

If you have any question or concern about the research, please feel free to contact me, +264 814113184 or email: fulatazimba@gmail.com. The research supervisor, Associate Professor Kathy Michell may also be contacted at kathy.michell@uct.ac.za.

Purpose of the study

The primary aim of the study is to add to the understanding of the role Facilities Management practices play in the running of government's property assets, and the effect that that has on the internal stakeholders of the buildings.

Procedures

Your participation in this study is voluntary. If you volunteer to participate in the study, we would consult you to agree a time that would be suitable for a face-to-face interview or alternatively a virtual interview. In order to accurately capture the information during a face-to-face interview, we will be recording the interview.

Potential benefits to participants

At your request, the anonymized research findings will be shared with you.



Confidentiality

All information and data gathered will be 100% confidential. There will be no mention of any individual's name or position within their organization. Each interviewee shall be assigned a four-character code, consisting of two letters and two numbers e.g. IN08. These codes shall be randomly assigned and have no relation to your personal information or the organization that you work for. The information gathered through the interview process will be used solely for this research purpose. The raw data of the interview will only be known to the student/researcher.

Participation and Withdrawal

You may choose to withdraw from this study at any time of your wish. You may also refuse to answer any question that you do not want to answer.

Rights of research participants

You may withdraw your consent at any time and discontinue participation without any penalty. This study has been reviewed and received ethics clearance from the University of Cape Town.

Signature of Research Participant/Legal Representative

I have read the information provided for the research as described herein. My questions have been answered to my satisfactions, and I agree to participate in this study. I have been given a copy of this form. I agree to the interview being recorded in audio format.

Name of Participant (please print)

Company of Participant

Signature of Participant

Appendix C: Interview Guide

INVESTIGATING THE EFFECTIVENESS OF FACILITIES MANAGEMENT STRATEGIES IMPLEMENTATION WITHIN THE NAMIBIAN LOCAL GOVERNMENT

Area of Focus	Question
FM Profession	In your understanding, what is the role of a <i>Facilities Manager</i> ?
Operational FM	Is there a framework in place for how <i>public sector FM</i> should be executed?
	How do GRN yearly <i>budgeting changes</i> impact how facilities are managed?
Strategic FM	What informs the <i>implementation of FM</i> in public facility?
	What role do <i>public facilities occupiers</i> play in determining how FM is implemented?
FM Behavioural Approach	What is your view on how efficiently public sector FM is implemented?
FM Performance Measurement	How is <i>FM performance</i> in a public facility measured?
FM Benchmarking	Is FM performance in the public sector facility <i>benchmarked</i> ? And if so, against what?
Recommendations	What recommendations would you suggest to improve public facilities management?
	Is there anybody else that you think I should interview?

Appendix D: Randomly Selected Interview Transcript

INVESTIGATING THE IMPLEMENTATION OF FACILITIES MANAGEMENT STRATEGIES WITHIN THE NAMIBIAN GOVERNMENT

Date: 14 January 2021

Respondent: [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Interviewer: Fulata Zimba

Interviewer: Mr [REDACTED] thank you very much for giving me the time to speak with you, once again my Name is Fulata Zimba, I'm a masters student at UCT, this is in part fulfilment of my Masters in Property studies, I need to do a dissertation, my selected topic is facilities management, what I found when I did my preliminary research was that there isn't really a strong body of knowledge with regards to facilities management within the Namibian context, so I saw the opportunity to start here and to just tap into the minds of the people who have worked extensively within public sector facilities. I've sent you the questionnaire beforehand, it is pretty straightforward, it is more of a discussion where I just want to tap your mind about your experiences specific to how fixed asset management and how facilities are managed within the Namibian government.

Respondent: Thank you, I think I mentioned to you, facilities management or manager, is you know the maintenance of your immovable properties be it a hospital, be it a clinic whatever immovable property, that is now you also look at issues like the health and safety issues, does the building need certain requirements maybe whatever standards you know you look at your materials that is used.

Interviewer: Hmm.

Respondent: That is in short, that is what I think I mentioned to you, that here in Namibia you have your... in our ministry, who is the custodian of all government properties, the government of the republic of Namibia is the owner, we are the you can say the custodian or we manage these, then you have now the user ministries, now these ministries they are not the owners of those buildings, they are only using it; you know the offices. Because those buildings are specifically; like a hospital is for ministry of health and social services so they are using it, police stations they are designed I think you know to meet those requirements for you know. So, the department of works, if you look at it like I have explained to you on was it the Monday or Tuesday, you have the capital projects, you have fixed asset management, you have your maintenance, now what we are doing here is not that, we are really...

Interviewer: Hmm.

Respondent: ...you know a facilities manager he will go out and see if there's leakages, see to it that those, if a building needs to be renovated, he will see to it, he will look at it and see what are those breakages or whatever issues must be attended to, but here we...

Interviewer: Yes.

Respondent: ...fixed assets, you know we are only when it comes to the allocation as a building, say for example like let me take now a good example, the ministry of home affairs they have constructed, their building is almost finished, the one in Windhoek north, now they will move out from here where they are new currently in independence avenue, now if they moved out, I don't know if they will take all the offices, whatever departments to that new building, say for example they moved out here and they go to the new building all the departments you will have a centralised you know all the services will be there, now once this building becomes vacant is where fixed asset management is coming in. We will then give this building, look at what are the needs of other ministries to see which ministry we can accommodate in that building because we are spending a huge amount of money annually on rentals where we are renting is in private buildings also to curb that or to work on that is where we will say okay, if there's a ministry that is having...

Interviewer: Hmm.

Respondent: ...definitely ministries will have... because we are scattered over Windhoek, we look at it and say okay- the ministry of agriculture, they need offices, we will then accommodate them, we will look at what are their needs- how many offices because it you know you cannot allocate a three-story building to say for example a 50 there's only one unit that needs office accommodation, so we will look at the ministry which is in need of say 100 or 200 offices

Interviewer: I see.

Respondent: We shall accommodate them in that building. But now we can accommodate, but now the issue of is that building you know that building was occupied since 1990 by home affairs so definitely that building needs some maybe some serious renovation.

Interviewer: Yes.

Respondent: Now what happens is that ministry that will come in they will look at it or they will... what they will do is they will engage our maintenance people or our capital people, it depends on what they want to invest and if the money is available and the state of the building, now they will look at it and say okay a cost estimate will be done they will take one of our quantity surveyors or they will appoint a consultant and do a cost estimate and say this is, it will cost 20 million or 15 million because now because needs in terms of offices are also differs for ministry to ministry but you see there is an office norm when it comes to offices the size of the offices but now you know as I said ministries have their own unique needs so they might convert if there is an open plan office partition it you know all those are the issues you see. The capital projects like I said it depends on how much money, what is the condition of the building that you mentioned the state of the building if it is a minor renovations then it will definitely come to our department, if we don't have the manpower we have the annual tender where we make use of the smaller companies to come and they are on the annual tender and we will engage then to go and do, it depends on the prices and they will then once the company is appointed he will then go and do the maintenance.

Interviewer: Hmm.

Respondent: If it is like... I was told the building which is occupied opposite CTM building the office of the prime minister, the public service commission occupied the building but the cost of... or I was told that water during the rainy season water is running in, some of the floors have even been damaged, now you look at it will not be a minor renovation it will be they might spend 10 million or 7 million or how many million that is where capital projects are coming in because they annual tender goes up to 2 million or 3 million so everything above that becomes a capital project. It's when it comes to our offices... ministries will come to us and say we are in need of offices see if you can find us if there's a government building then we can look at it if there's no government land of building available then we need to go on the market and see but when it comes now to the that part, the facilities, to manage that or to when you look at you know what defects in the building this is now where our maintenance people are coming in.

Interviewer: I think that is very clear, I think what I understand is that the fixed asset department is heavily involved in the strategic allocation of facilities to the different user ministries (yes) okay I get that. So just to go through the questions, the first one I think you've answered it quite extensively, the second section I would like to touch on is operational facilities management. Okay I think you have explained what the framework is in place.

Respondent: You see now (██████ reads the question) **is there a framework in place to how public sector facilities management should be executed.** ████████, because I can remember all these years, I don't know how far we have gone, we've had so many consultants and even not only consultants but from on our own where we have taken up the initiative to come up with you know how to go about when it comes to facilities. I can remember there were manuals, but that is ████████ from maintenance might be in a better position to explain to you how they go about it.

Interviewer: Okay I think I've got that.

Respondent: The issue of **budgeting.**

Interviewer: Yes, because you are at the top of the strategic hierarchy how are changes in budget handled and what are the impacts of such changes?

Respondent: You see a few years ago, just to give you an idea or to give you a picture, it might have been 20 years ago, they had estimated, there was an estimation done on the worth or the value of the government properties across the country and I think that time the across it was said that...

Interviewer: Hmm.

Respondent: ...I don't know how they have done it but I think they mentioned that it might have been 18 billion so then I spoke to one of our directors who was a QS and he said you know if you look at, he mentioned it's an international standard, when you look at, you take the value of your assets and you budget according to a percentage, I don't know how much that percentage is, to be able to maintain your buildings but here it's totally different because there are various reasons and I think the first thing we must look at is where we are coming from you know we are now independent for 30 years and our history, I don't want to talk about prior to 1990, but if you look at, there was so many, you know the priorities after 1990 you know, schools, if you look at the north- north east of the country where there was not you know... Children had to walk 5km to school so you know now government prioritised you know its schools, its clinics, hospitals, you know to bring those services closer to the people now I think that now if you look at the maintenance... If we look at over the years our maintenance budget over the years, I don't think that we could have done much when it comes to facilities maintenance because the money was... There were other priorities you know so we got money from government but that money was not that you could say that you know you maintain you could have maintained half of your building, money was not that much and since 2015-2016 when we had this financial crisis, money has become just, what they are getting I spoke to the guy who was there but he resigned, he said [REDACTED] - he mentioned an amount I don't know, a 2 million dollars, what can you do with a 2 million dollars? He said its, there are, he said [REDACTED] just go and look at our, they have a, you can call you know you send your request for whatever if there

is something you know water leaking, but they cannot perform all of those duties because of the money.

Interviewer: **Yes, because the needs, and the hierarchy of needs from their assessments or what governments needs to address all of its obligations, maintenance is understandably not the highest priority because of the historical context we live in.**

Respondent: Yes exactly, because you know when you open newspapers, since after 1990 the public are complaining yeah look at this building look at this building look at it, it's true there was not the money that we got, you see before this function you know the maintenance function was decentralized, I know that it was the duty of our people here but now that function has been decentralized, the ministry is still budgeting but the money is being given to the regional councils they are now doing everything you know what was done by the ministry in the past before the decentralisation that is now the responsibility of the regional councils.

Interviewer: **hmm, interesting.**

Respondent: Now when it comes to what also happened, there is a cabinet decision, I was told that there was a cabinet decision, that each and every office/ ministry, they must create on the establishment a small unit, I don't know how many people, a small unit in the ministry itself, you know, people who can look at you know if there is a burst pipe, you know a tap that is you know, you look at light fittings you know, to look at those minor issues that they can attend to, they get money they go and they buy those things and just to replace instead of to go now and get a contractor to come and just to replace a bulb or so, so now you have that small unit, I think they are electricians because we have one guy here, I think it's small but that is also for me it's a step in the right direction you know, a leaking tap, you have someone there who can look instead of getting a someone from these contractors you know here's someone who can just fix it now, they get the whatever material and they can fix it, I don't know in all the ministries if that is already in place because I can remember there was also now you need to make budget it's for salaries you know, they must be approved by the public service commission you know, put them on the structure, salaries, its benefits

that is going with, so because I can remember I think ministry of education was one of the first ministries where such a unit in place, but I don't know for the other ministries, I think even ministry of defence also have, some of the ministries have in place those in units you know not necessary to go out you just order the material and get the repair done.

Interviewer: So, the ministries have been given that mandate to have a small maintenance unit

Respondent: Yes, just to attend to these small issues, minor maintenance issues

Interviewer: Yes, I get that, so it's basically the buildings would have so called custodians who do the day-to-day maintenance small things, and that would of course help with the expense because you have it in-house.

Respondent: There's also budgeting, you see ministries, the buildings that they occupy, ministry of works is not responsible for the say major maintenance, ministries must make provision themselves for the maintenance of their buildings. I think it changed in 1995 or 1994 around there, these functions were just delegated to all the ministries to say when it comes to budgeting you are responsible because you are occupying your facility so you also need to look after it.

Interviewer: Yes.

Respondent: Just an example, since 1990 ministry of works were responsible for the payment of water electricity refuse removal taxes, and the bill was very high they were times when it comes to August-September money is already gone you see and because it was an attitude because you see people they are knocking off at 5, they are not switching off the lights the tap is running and they are not reporting it so when that function was decentralized to say now each and every ministry's you are now responsible to budget for it, it's when ministries started to budget, so now they switch off the lights, when there is a running tap they report it, whatever is there they are reporting it, so that like I said those functions or those responsibilities were given to the offices ministries so that they can. If you look at the building in town that I have mentioned the office of the prime minister... I think my colleague she went there with the QS they have done the cost estimate but I don't know now they will get a contractor not a small contractor one of

these to go and do a fully renovation of that building like I said when the amount is I less that think 2,3, or 4 million then it goes to the annual tender. But ministries they must make provisions, the offices where ministry of gender is, that office was also flooded by water and I was told that the building was in a terrible condition but they had to it was renovated and upgraded and they have also constructed an additional tower to cater for that ministry but that building I was told it was in a terrible condition because the lifts were not working, water was running in, so that is on the issue of the budgeting.

Interviewer: The next area we want to focus on is on the strategic FM, I think you've touched on some of it, the position that your department of fixed assets management plays in the strategic implementation of how facilities are managed but from what I understood, your department is the first level at a high level to allocate buildings to user ministries depending on their needs.

Respondent: Yes.

Interviewer: And from then on it goes to the maintenance guys who will be doing the ongoing FM.

Respondent: Yes, ours is only the allocation, you know to make sure that there is order you know this one is occupying, this one is moving in, so that there is a department who is responsible when it comes to offices the allocation of a building few offices buildings- that is our responsibility.

Interviewer: I think you answered the second sub question basically **the user ministries what role do they determine in how the facilities manager is implemented** I think you explained that, that in house they are in charge of the maintenance they are in charge of the budgeting and they have custodians in place or they have been allowed to have a custodian to maintain he day to day, and it's been decentralised it's no longer done by works its done by the user ministries in order for the expense and cost to be controlled.

Respondent: like I said anything major, that is capital projects, but it depends on like I said it depends on the cost involved you will see that this unit in the ministry of finance is not does not have the capacity to say a leaking pipe let's look at a

burst pipe, they will then contact the maintenance the maintenance in the regional council and submit their request to come and look at it they will then if they don't have their own people they will then outsource it to the guys on the annual tender.

Interviewer: I just want to get the sequence correct, so if there is a big intervention needed, would the user ministry first have to come to fixed asset management?

Respondent: No, what they are doing is that they are going directly, you find that in some cases they might come through the office of [REDACTED] because he's the director of maintenance so he will then send it to the regional council, the director or deputy director of technical service they will attend to those issues.

Interviewer: Okay perfect.

Respondent: like I said if you look at... you know some of the things are, that's why Mr [REDACTED] he will come in very handy here to share some of these things with you on whatever is coming in, what is being sent directly to the regional council because I don't think that because now that function has been decentralised it goes straight to the regional council.

Interviewer: I think that is very clear, the next question I have is just to get your opinion, in your view, how efficiently is FM being implemented.

Respondent: In my opinion you know it's not what it should be, we can perform much better, we can perform much better you know. If we look at... like I think, is it last week or the week before I read something where one of the something happened, I cannot remember where it was at one of these offices, and this person was saying that we have called ministry of works, since... that is now the maintenance department...

Interviewer: Hmm.

Respondent: ...since whatever month and they are not coming or they were here they just looked at the problem but they never came back so I said we can do much better it might be also I don't know whatever the reasons are but what I suspect is that it might also be financial constraints or whatever the case may be you see

because you will only hear the one side, the complaint but you don't hear what are the reasons that ministry of works did not go out to attend to a burst pipe or whatever it is

Interviewer: That brings me to my next question.

Respondent: That is where [REDACTED] might also because he will tell you that it might also be an issue that we don't have the necessary equipment you know there might be some other reasons why but he would be able to tell you that one.

Interviewer: Perfect I will expound on that with him, the next question but this is also... I mean as we have spoken, I think these are things that Mr [REDACTED] might or the user ministries would have to because this is probably a part of their budgeting practice would be to see how the FM is performing and measure how cost effective it is within the budget?

Respondent: You see it's just a pity that [REDACTED] is not here because you know [REDACTED] [REDACTED] he use to work... he's an engineer in capital projects I don't know for how many years, so what happened is he applied for a position at the Omusati regional council so there he was exposed also to the maintenance; minor and major, now you can say he's I wouldn't say an expert, but he's having all these experience you know knowledge of here at capital projects, he went to the regional council, he was deputy director there for technical services so all these issues on maintenance and capital project you know and then he got this position you know he's having knowledge on these issues, so he's having a lot of knowledge on this, its fixed asset- capital projects -maintenance. I don't know when he's coming back.

Interviewer: I'll speak with his secretary because I've been trying to contact him but, and I've left a letter for him.

Respondent: I'm not sure if they said he will be back the first week of February, I'm not sure. But he is really, you know when you talk to him on those issues, since he was appointed here, I've listened and you can just see and hear that his knowledge on these issues you know.

Interviewer: I'm just noting everything done, there is so much valuable information that I am getting. I think this also ties into the next section which ties into the performance benchmarking that would of course be ministry, user ministry specific.

Respondent: Yes.

Interviewer: Finally what recommendations would you suggest to improve how these facilities are managed? I know its broad but it's just your opinion.

Respondent: You see there was some efforts to have a system in place to link, it's just a pity that these things I don't know what happened, to link assets, that was the whole idea, to link fixed assets management with maintenance, so once they request because we are having you know all the buildings are numbered, so once there's a request for a building number say where ministry of home affairs is, we could've give them that information and we are being linked on what will they go and perform there then we would have seen noticed, I mean it would be here on our system to see okay this is the request that came in for this and this and this, that linkage then we would've known that look this is what happened there or that is the problem, there's a contractor that needs to be appointed to go an perform this or that, but this thing went very far, there was a company I think it was Solnam.

Interviewer: Solnam?

Respondent: I'm not very sure, was to link so that they know what we are doing and we know what they are doing, so that we could see so that when we look at our assets here, the home affairs building, we know that on this and this day date this was that was the issues that was the renovation that was done that was also to track what was being done over the years but this is man to be honest I don't know what happened there but that was the whole idea it was to link us you know the building because you know definitely if you have an asset register an asset register is not just an inventory, you need to have it to see what has been done you know because in some cases today you know I'm just honest with you sometimes people ask when was the last renovation ever done on this building, we are unable to tell him say.

Interviewer: I see.

Respondent: For example the minister calls you and asks you, you would not be able and you see that's why we wanted to link fixed asset with maintenance so that you know so that we see this building is a 3 story 5 story building these are you know it has been renovated these changes were made to these floors you know maybe partitioning but unfortunately that never materialized, everything was in place I think it was just some requirements because some of the things they put on the system you know the interface some of these computer language I'm not a computer expert but you know now you put because they ask what is your requirement in terms of what do you want to see on the system those guys also so once we open and see this is the building 5 story building so many offices so many what so that we could've been linked in the event not the event but so that maintenance wise we know is they know what is the size of the ERF they know what is the floor size they know how many offices they have that was the whole idea but unfortunately and that would have assisted us a lot.

Interviewer: That integration, would it be between yourselves?

Respondent: Fixed asset management and Maintenance all of us here or certain office say because there was also the issue of security that to avoid that people make changes to this, I think it was supposed to be to give that access to all the supervisors so the you know your subordinate can come. Maintenance functions need to be streamlined and processes finetuned. Namibia is such a vast country very sparsely populated, with schools and clinics located in very remote areas. When a maintenance issue is logged, the guys have to first drive far distances to reach the school or clinic, assess what the issue is, then drive back to the main town and get the supplies then drive back to attend to the maintenance issue. This process takes very long time and a lot of resources in terms of traveling. Buildings in these remote areas do not have an in-house custodian who deals with daily maintenance issues. Another issue that we are faced with is that a lot of us staff members do not have tertiary education in line with their specific job, we have progressed through the ranks in the Ministry over the years and learnt on the job. We do not always have the latest training in our field. We do employ university graduates who have been educated on say facilities management, but

they only stay with the ministry for a short time before leaving for a job in the private sector that pays more and also because for them to progress within their job in the ministry to a higher earning position can take many years because someone above them would have to quit or retire before a more senior position becomes available, so we lose many talented people who could really advance the ministry. We need to give graduates an attractive career path within the ministry in order to retain them.

Interviewer: Thank you, my final question, do you think there is anyone else I can interview or should interview?

Respondent: Yes, ah think you can speak to a [REDACTED].

Interviewer: Mr [REDACTED].

Respondent: Yes, let me write it for you. And the people I spoke about before; [REDACTED] and [REDACTED].

Interviewer: Thank you very much. I appreciate it.

Respondent: It's a pleasure.

Interviewer: And thank you for your time today, it was a pleasure speaking to you, it was very insightful.

Respondent: Yes, it's really a pleasure.

[end]

Appendix E: Copy of the tree node structure exported from NVivo

Codes

	Name	Files	Reference
[-]	FM Practice and maturity in the Na	0	0
	○ Benchmarking	9	17
	○ FM Framework in Namibia	11	27
	○ FM Implementation	11	23
	○ Performance measurement	9	16
	○ Stakeholder Involvement i	11	16
[-]	Maturity of FM implementation	0	0
	○ Budgets	11	38
	○ Occupiers abuse infrastruc	6	13
	○ Politics	10	16
	○ Priorities	9	15
	○ Strategy and preventative	7	19
[-]	Scope of the FM Profession within t	0	0
	○ custodian of government i	4	4
	○ maintenance of facility	7	7
	○ Monitoring	5	5
[-]	Towards improved FM strategy and	0	0
	○ Better planning and strate	3	5
	○ Better quality assurance	5	5
	○ More accountability	2	3
	○ More collaboration	3	4
	○ More Education	4	7
	○ More resources and fundin	5	7
	○ More robust reporting and	5	9