

DURBAN UNIVERSITY OF TECHNOLOGY

**THE EFFECT OF SOLID WASTE ACCUMULATION
ON TOURISM BUSINESS IN THE CENTRAL
BUSINESS DISTRICT (CBD) OF
PIETERMARITZBURG**

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DURBAN UNIVERSITY OF TECHNOLOGY
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THE EFFECT OF SOLID WASTE ACCUMULATION ON TOURISM BUSINESS IN THE CENTRAL BUSINESS DISTRICT (CBD) OF PIETERMARITZBURG

Submitted in fulfilment of the requirements of the
Master of Management Sciences Degree in Hospitality and Tourism/Environmental
Management in
the Faculty of Management Sciences at the Durban
University of Technology

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August 2022

Supervisor: _____

_____ Date: 24/08/22 _____

DECLARATION

I declare that this study:

THE EFFECT OF SOLID WASTE ACCUMULATION ON TOURISM
BUSINESS IN THE CENTRAL BUSINESS DISTRICT (CBD) OF
PIETERMARITZBURG

Unless specifically indicated to the contrary in the text, it is declared that this is my own work in both conception and execution. All the sources of information used or quoted have been duly acknowledged by means of complete references.

SINDISIWE BENEDITA NZIMANDE

10 August 2022

DATE

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DEDICATION

I wish to dedicate this Masters dissertation to my mother Badumile Agnes Nzimande and late father Mlamuli Michael Nzimande, my daughter Sikhanyiso Snothando Phetha, my siblings Sinenhlanhla Nzimande, Mbhekiseni Nzimande, Sizwe Nzimande, Kwazi Nzimande, Mthokozisi Nzimande, and everybody who supported me. I did this as a token of my appreciation to you for constantly believing in me. There is no doubt in my mind that without your sustenance, reassurance, inspiration, and guidance I would not have completed this work.

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ABSTRACT

The tourism business is susceptible to its environment, and Pietermaritzburg has been affected by high solid waste accumulated on the streets of the city which subsequently influences the tourism business. Research shows that solid waste mismanagement in the city is the result of maladministration, improper expenditure, and overall lack of accountability from government departments. This study aims to investigate how this issue has affected the tourism business in Pietermaritzburg. Based on the review of literature and theoretical frameworks, a qualitative research design was adopted to answer research questions. Individual interviews were conducted from purposively selected sample in the study area. The researcher interviewed both managerial and non-managerial employees from the selected sample of tourism businesses. This study used systematic theme analysis, by analysing content presented in the data from interviews. Analysis of results demonstrated that waste mismanagement affected the tourism business in a sense that visitors are not frequenting the attractions because they have safety concerns, and poor hygiene in the city could pose threat to their health and wellbeing. The study found that negative customer positioning, lack of service delivery and poor infrastructure were some of the biggest challenges for the tourism business in the city. Tourism cannot be developed as a lone industry; it needs collaborative efforts from all stakeholders especially government to provide essential services for tourism to thrive. The study recommends a model that could be used by the tourism business and government for improved service delivery. It also recommends that tourism areas should be treated differently than domestic areas when it comes to waste collection schedule development, and waste prevention where practical. This would prevent the amount of waste accumulated on the streets of PMB and the amount of waste that goes into landfilling.

Keywords: Tourism Business, Solid Waste, Accumulation, Pietermaritzburg

ACRONYMS

AShelp	Assignment help
ANA	African news agency
IDP	Integrated Development Plan
COGTA	Cooperative Governance and Traditional Affairs
DoE	Department of Education
DUT	Durban University of Technology
TALC	Tourism Area Life Cycle
FRC	Faculty research committee
GDP	Gross domestic product
INDS	Integrated national development strategy.
IREC	Institutional research ethics committee
KZN	KwaZulu-Natal
NDP	National development plan
PSA	Public service act
PFMA	Public finance management act
PMB	Pietermaritzburg
RSA	Republic of South Africa
SA	South Africa
SONA	State of the Nation Address
STATSSA	Statistics South Africa
NGO	Non-Governmental Organization
UN	United Nations
UNESCO Organisation	United Nations Education, Scientific and Cultural
WHO	World Health Organisation

NEMWA	National Environmental Management Waste Act
SACA	South African Constitution Act
MSW	Municipal Solid Waste
SAWIS	South African Waste Information System
ENCA	eNews Channel Africa
WMBU	Waste Management Business Unit
MRF	Material Recovery Facilities
BBA	Back to Basics Approach
WPTSD	White Paper on the Transformation of Service Delivery
NEMA	National Environmental Management Act
MSWM	Municipal Solid Waste Management
NCO	Nature Conservation Ordinances
MIWMP	Msunduzi Integrated Waste Management Plan
SAC	South African Constitution
ATA	Antarctic Treaty Act
DEAT	Department of Environmental Affairs and Tourism
CoBD	Convention on Biological Diversity
UNEP	United Nations Environment Programme
COAR	Conservation of Agricultural Resources Act
IWMP	Integrated Waste Management Plans
EPA	Environmental Protection Agency

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THE EFFECT OF SOLID WASTE ACCUMULATION ON TOURISM BUSINESS IN THE CENTRAL BUSINESS DISTRICT (CBD) OF PIETERMARITZBURG

CHAPTER ONE

INTRODUCTION AND ORIENTATION TO THE STUDY

1.1 Introduction

Tourism businesses are open systems which means that they are susceptible to their environment. They are largely affected by the external environment, economic, social, political and law, technological and natural (Jones & George, 2020). Municipal Solid Waste (MSW) management is also influenced by educational, legislation, historic influences, social norms and concerns, natural environmental concerns, economic factors, institutional factors, legislation, and political contexts (Naidoo, 2009). Therefore, for tourism to thrive it is dependent on the municipality for service delivery and keeping the city clean as the tourism destination itself.

According to Murava and Korobeinykova (2016), sanitation cleaning and removal of urban garbage are ongoing environmental problems in developing nations, and South Africa is no exception. South Africa, according to McTaggart (2019), is experiencing a garbage issue that needs to be taken seriously and addressed right away. Every year, South Africans generate roughly 54.2 million tons of general waste (city, commercial, and industrial). Only 10% of these 54,2 million tons of waste may be recycled or used for other purposes, and 90% of it is landfilled or otherwise disposed of. Industrial and mining waste is the most prevalent in terms of volume, but municipal solid waste has a higher influence on daily life and is eligible for public financing (IDP, 2020).

Kaza et al.,2018, emphasize that solid waste management is important for sustainable, wellbeing, and inclusive cities and communities yet it is regularly ignored, especially in low-income nations. Uncollected waste and improperly disposed garbage have serious health and environmental consequences. The cost of dealing with these consequences is typically more than the cost of designing and implementing simple, effective waste management system (Kaza et al., 2018). From as early as 2008, the Capital City of Kwazulu-Natal, Pietermaritzburg (PMB), was already labelled as the city that was designed to “fall apart” by the then municipal manager Rob Haswell (Mgaga, 2008). The then Minister of COGTA, Dr Zweli Mkhize articulated that solid waste accumulation levels in the city should have been a concern for everyone (Magubane, 2019) it is further denoted by (Ntuli, Ngcobo and Sinkins 2020) that the city of Pietermaritzburg is in the decaying state due to lack of maintenance and solid waste management. Inbound tourist arrivals in countries like China have been deteriorating, considering expanding levels of urban air contamination (Becken et al., 2017). The city of Pietermaritzburg is bearing the same pattern of deteriorating inbound tourists’ numbers as reported by (STATSSA, 2017), hence the need to investigate the effect of solid waste accumulation as a contributing factor in this study.

According to Butler (2006), the Tourism Area Life Cycle (TALC) Model is one of the most imperative models for sustainable tourism development, as it is used to describe what a destination is, understanding change in destinations and destination markets. Destinations become the crucial point for discussion. The TALC Model will be employed to direct the research for this study, as well as the structuring of the objectives, questions, questionnaire schedule, and aim, as well as any potential responses that may result from them, and to create the conceptual framework for this study. Shaw (1991) argues that when environmentalists, local government and businesses reach common ground about how waste minimization is beneficial in all contexts, the business however must bear major costs of changing the image (such as going green) of the business to retain the current market and attract the new ones.

1.2 Background to The Problem

One of the key issues in both rural and urban areas of many developing nations is the disposal and collection of municipal solid waste (Abdel, Hussein, and Mansour, 2018). Due to South Africa's rapid urbanization, expanding population, and economic growth, there is now a greater need for appropriate waste management guidelines, programs, and policies, which must be established and implemented (STATSSA, 2012). The mismanagement of solid waste in the region of tourism business operation has a significant negative impact on the tourism industry. The total solid waste management system is unable to keep up with the cities' daily expanding solid waste demands (Shamshiry et al., 2011).

Absence of waste management programs in tourist cities and destinations leads to unlawful disposal of the majority of produced solid waste, which halts the threat to human health, disturbs the environment, and lowers the destination's reputation for recreational activities (Murava and Korobeinykova, 2016). To meet the growing demand of tourists for ecologically friendly states of relaxation and tourism, it is necessary to identify the waste concerns in tourist locations and improve waste management (Murava and Korobeinykova, 2016). According to the literature, municipal waste, and other related waste, such as hazardous and organic waste, are the most prevalent sort of solid waste in tourist areas (Murava and Korobeinykova, 2016).

1.2.1 Problem Statement

This study addresses the problem of negative image positioning of Pietermaritzburg as a tourist destination and how solid waste accumulated on the streets of Pietermaritzburg CBD has contributed to this problem which subsequently affects the tourism business in the area.

Previous studies from different scholars such as Naidoo (2009) and Nkubanzi (2010) have primarily focused on how waste is generated and managed in Metropolitan cities and affects human health, which roused the need for this study.

Tourism's importance in the economy must be maintained, if not expanded, through proper solid waste management. Tourists are looking for a clean environment, not one with waste strewn about (Hassan and Peterson, 2016). Despite having rich heritage and affordable recreational activities, the city of Pietermaritzburg has been struggling to attract both domestic and international visitors and this needs immediate attention (Ntuli, 2019), therefore providing the need to conduct this study.

1.2.3 Significance of study

The significance of this study is bridging the gap in identifying how the municipal waste management systems affect tourism, a study of this nature has never been conducted before.

1.3 Study Aim

This study aims to investigate the effect of municipal solid waste accumulation on tourism business in the city of Pietermaritzburg and forward recommendations for improved service delivery and solid waste minimization/prevention strategies to the local government and stakeholders. And, to forward turnaround strategies for the affected tourism businesses.

1.3.1 Research Objectives

The objectives of this study were critical because they described what the researcher hoped to accomplish through the study and addressed the most significant components of the research challenge. Bischoff and Rädler (2011) used the research objectives to weave the investigation together, give it purpose and coherence, and create a framework for the final report.

Objective one

To investigate the effect of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).

Objective two

To explore the solid waste management process in the tourism business in Pietermaritzburg CBD

Objectives three

To explore how the destination negative image positioning regarding waste accumulation on the Pietermaritzburg CBD is adversely affecting the tourism business.

1.4 Research Questions

According to Patelin (2015), well-constructed research questions provide the study scope. The following research questions were aligned with the research objectives and were significant in that they gave the study a focus and emphasized what the researcher did and did not do.

- What effect does solid waste accumulation have on tourism businesses of the Pietermaritzburg Central Business District (CBD)?
- What is the waste management process in the tourism business in Pietermaritzburg CBD?
- How does the negative destination image of Pietermaritzburg CBD adversely affect the tourism business?

1.5 Main concepts defined.

It was critical that the study's major concepts and key words be defined. This was since these points of view informed the reader about the study's setting. The study's primary themes and major problems are outlined in significant words (Bidyarthi, Krishnapada and Sen, 2008). Because of their applicability and importance to the study, the researcher identified the words that follow.

1.5.1 *Effect*

According to the Vocabulary Dictionary, the effect is a result of a cause phenomenon. It happens after there has been a cause of action. This is very much evident in this study because the effect of solid waste accumulation is a result of human activity, poor service delivery and lack of waste management policy implementation.

1.5.2 **Tourism**

Tourism can be defined as travel to areas other than your own for consumption of goods and services. Tourism is the activity of spending time away from home looking for entertainment, relaxation, and enjoyment while making use of the essential infrastructure (Walton, n.d). This concept highlights the type of the targeted industry, businesses, and participants in the study area.

1.5.3 **Solid**

Encyclopedia defines solid as one of the four imperative states of matter (liquid, gas, and plasma) where solid molecules are tightly packed and contain a small amount of kinetic energy. Solids neither take the form of their containers nor stretch to cover the entire space. There are different waste types from different generation streams, (liquid waste which is generally oil). This study focuses on solid waste that is accumulated in the Pietermaritzburg CBD.

1.5.4 **Waste**

Waste can be defined as the lack of value in material and is discarded because it no longer serves any purpose for the user. Waste can be classified by its compositions (solid, liquid, plasma, and gas) (Nkubanzi,2010). The type of waste that this study focuses on is solid waste which has been highly visible in the Pietermaritzburg CBD and other areas in the province of KwaZulu-Natal (Ngcobo, 2020).

1.5.5 **Accumulation**

According to encyclopedia, accumulation refers to an increase or piling up in amount of something either qualitative or quantitatively. Accumulation is of paramount importance in this study because there has been an increase in reports of waste that is pilin up in the CBD and has not been collected, swept nor removed from the area of generation.

1.5.6 **Business**

A business is a firm, or an innovative organization involved in commercial, industrial, or infrastructure projects. Businesses can be for profit and nonprofit organizations with charitable or social objectives (Hayes, 2020).

1.6 **Setting of the study.**

This part diagrammatically and quantitatively introduces the research field. The research was conducted in Pietermaritzburg, the capital and second largest city in the KwaZulu-Natal region of South Africa, with a population of 10 267 300 people in 2011 (STATSSA, 2011)



Figure 1.1 South African Map showing Pietermaritzburg.

Source: Maps South Africa

1.7 Research Method

Research methodology is a way on how to solve research problems (Kumar, et al.,2009). It examines and explains the rationale for various research methodologies and procedures (Welman, Kruger & Mitchell, 2007). A qualitative research method was used for this study.

1.7.1 *Research Paradigm*

The research paradigm for this study is constructivist, which can be defined as interventions and interactions and their effect in multiple contexts, and understanding from an insider's perspectives (Anderson, 2013).

1.7.2 *The Research Design*

The goals of qualitative research are to understand some social phenomena, and the methods used to collect the data are those that yield words rather than figures (Patton, 2002). Qualitative research approach is an interpretive and subjective endeavor in which the researcher is actively involved rather than detached from the process (Pope and Mays, 2006).

A qualitative research approach was used to better understand what some of the reasons are that there has been poor waste management by the municipality and how has this impacted the tourism business in the municipality. This study uses a qualitative research approach which guides the study collection techniques and the probable results from the research. One on one individual interviews serve as a tool to collect primary qualitative data from the participants who in this case are the tourism business personnel as elected by the organizations. A research design, according to Mouton (2009), is a strategy for conducting a study or piece of research. He also denotes that the research design emphasizes desired outcomes and the results of the type of study being planned.

For this research, a descriptive case study design was employed because the researcher is basing the study on only one central business district (CBD) and specifically tourism businesses to acquire in-depth information and study the characteristics of the sample group. Orodho (2013) argues that case studies

are a way to gather data by interviewing or distributing a questionnaire to a predetermined sample of people.

1.7.3 *Target population and sample*

The process of picking a subset of the population that meets the study criteria to represent the full population is known as sampling (Mbokane, 2009:84). A sample is a portion of the general population that has been selected for research. There are two distinct kinds of sampling techniques. The first generates probability samples that assure the selection of every respondent. The other generates samples with no likelihood of selection, or non-probability samples (Samkange, 2009).

The population size for this study is thirty-five tourism attractions in the whole of Pietermaritzburg. The sample for the study will be the tourism establishments in the Pietermaritzburg CBD. The size of the samples is ten attractions inclusive of landmarks that are under the administration of the Pietermaritzburg Tourism. This therefore means the 6 stand-alone attractions being uMsunduzi Museum, KwaZulu-Natal Museum, African Link Tours, Tatham Art Gallery, SANBI: KZN National Botanical Gardens and Imperial Hotel will each have their own separate gatekeepers' letters, and the Gandhi Statue, Pietermaritzburg Railway station, Old Colonial Building, One O'clock Gun and City Hall will be encompassed from one gatekeepers' letter from Pietermaritzburg Tourism. From each establishment the researcher purposively requested two participants who represent both managerial and non-managerial employees to participate in the sample because they have different interaction with tourists on their organization.

The sample for this study is purposively selected because the selected attractions have similar characteristics and those being tourism business, and they are all spread across various parts of the Pietermaritzburg CBD as the study investigates solid waste accumulation in the CBD.

1.7.4 *Data collection method*

1.7.4.1 Primary Data Collection Method

According to Patton (2002), interviews are like typical conversations with the exception that they are (to a greater or lesser extent) focused on the researcher's data needs. They differ from casual chat in that they are focused on carrying them out as scientifically as possible to ensure validity and reliability.

Semi-structured in-depth interviews were used in this research. This form of interview is designed to delve into the respondent's personal perceptions and recollections in greater depth. This strategy is applied to issues about which little is known and where a thorough grasp is required (Patton, 2002). This study used Microsoft Teams app and interview schedule as tools to collect primary data.

1.7.4.1.1 Interview Schedule

A list of questions and other prompts are included in an interview schedule, it is a tool used for gathering data from respondents. (Abawi, 2013). Individual interviews were done, and an interview schedule was used as a data collection tool. The interview schedule was chosen because it enables the researcher to pose consistent questions.

Research respondents were interviewed virtually on their Microsoft Teams applications to ensure accuracy of all issues and eliminate misinterpretation of some research questions. According to Mbambo (2009), an interview schedule, like a questionnaire, is the ideal tool for data collection if the research methodology is used when the participants are unable to read or write. The researcher requested for a private meeting on Zoom where participants were interviewed individually, and data recorded for analysis. This was done to maintain privacy and confidentiality of the participants.

1.7.4.2 Secondary Data Collection Method

Optional data is any dataset not gathered by the author, or, to put it another way, "the examination of data accumulated by another person." Secondary data may include data that has recently been obtained and is being examined

for the purpose of being repurposed for new enquiries for which the data obtained was not originally intended (Carneiro da Cunha and Martins, 2018).

This study uses secondary data from publications, institutional websites, reports and policies, books, and e-books, to review literature.

1.7.5 *Validity and Reliability*

Validity is a term that may be applied to every step of the research process; it describes how well each step fits in with what you were hoping to learn from the study. The interview schedule was submitted to experts in the field to make sure that the questions are both appropriate and comprehensive. Comments received were then included in the final draft of the interview schedule. The relevant research committee of the Durban University of Technology including the Research and Ethics Committee further reviewed the interview schedule. In addition, audit trails are employed to increase the accuracy and validity of the research findings. Thus, addressing issues of reliability and validity. The capability of a data collection instrument to consistently produce comparable results when utilized again under similar settings is defined by Noble and Smith (2015:34) as reliability. The qualitative component of the research is assessed for data trustworthiness which consists of credibility, transferability, dependability, and confirmability.

1.7.6 *Data analysis*

Data Analysis is a process whereby data that has been collected is explained or interpreted to create possible conclusions and open room for recommendations where needed (Sunday, n.d:19). Because this is a qualitative study, data collection methods such as interviews are being used, qualitative data analysis methods are used to analyze data. In this study, thematic data analysis was used, with some components including data familiarization through reviewing, reading, and listening, transcription of recorded material, data arrangement and indexing for simple retrieval and classification, and anonymization of sensitive data (Lacey and Luff, 2009).

Microsoft Excel was used to analyze quantitative data of this study (which is biographical information, however it does not affect the outcomes of the study).

1.7.7 *Delimitation to the Study*

The delimitation of this study is the sample size which is the tourism business surrounding the CBD of the capital city of KwaZulu-Natal, Pietermaritzburg. According to Simon (2011), delimitations are qualities that restrict the scope and specifications of your research. The researcher has complete control over the delimitations. Delimiting elements may include the researcher's objectives, research questions, and phenomena of interest such as theoretical viewpoints adopted vs those that could have been adopted, as well as the population of the study chosen for exploration.

The researcher can conduct the study by restricting the representative sample, the geographic area from which data is collected, the response formats offered by data collecting equipment, or the study's periods, and these delimitations can be documented (Baron, 2012).

1.7.8 *Permissions Needed*

Permissions to conduct this study were obtained from the selected tourism businesses where data was collected. According to Creswell, *et al.*, (2007), before the researcher may proceed with his study, he needs permission from the parties concerned, be it the site management, individuals/people concerned (parental consent when its children who are below the legal age), and the campus based institutional review board. They also denote that it does not matter whether it is a public site, permission to conduct should be obtained even from the gatekeeper of a Non-Governmental Organization (NGO) because it is ethical practice and reduce conflict of interest for the population needed to conduct the study.

1.7.9 *Ethical Considerations*

All participants were provided with a covering letter, indicating that their participation in the study is voluntary. During data collection, participants were

given a letter indicating that their participation is voluntary and signed a consent form.

1.8 Study Organization and Chapter Outline

The orientation and introduction were followed by the conceptual/theoretical framework, methodology, data presentation and analysis, and finally the findings, suggestions, and conclusion in an academically acceptable order.

Chapter 1 presents the introduction of the study. This includes the context of the study, research problem background and statement, aims and objectives.

Chapter 2 will provide an outline of the theoretical framework comprising of waste management and tourism, general trends and skills set to foster implementation.

Chapter 3 will constitute the literature review that will cover the definition of key terms, significance of tourism, general trends of waste management and skills set in the global scale.

Chapter 4 will explanation of research methodology employed in the study in terms of the research design, population, sampling, measuring instruments, the scope of the study, validity, and reliability.

Chapter 5 presentation of the study findings and discussions.

Chapter 6 constitutes the summary of the study, conclusions, and recommendations.

1.9 Conclusion

This chapter focused on giving an introduction of this study, articulating the research problem, the aim and objectives of the study, research questions and a summary of the research methodology. The main concepts are defined to emphasize their relevance in the study. The study area is identified using Maps which makes it easier for a reader to identify the municipality of interest. Then it further highlights what each Chapter will encompass in this study and concludes the chapter.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

The first chapter of this study provided the reader with an overview of the study, highlighting key points as such the problem's background, key objectives, and open-ended questions, as well as what the study hopes to accomplish by adhering to the proper methodology and data analysis techniques. Chapter two contextualizes the research problem and gives the research objectives new conceptual meaning. The chapter is crucial because it explains the history of municipal solid waste management and how it affects the tourism business.

2.2. Theoretical Framework

According to Mehta (2013), a theoretical framework is just as crucial in research as a foundation is in building and it is unclear if theory-free research is possible (Abraham, 2008). A theory is a framework of observations and knowledge that defines how the researcher observes and wants readers to see the topic under study (Sunday (n.d.), A theory directs the reader to the researcher's perspective on the topic. As stated in the first chapter, the Butler's Tourism Life Cycles was chosen to safe guide the lens through which the problem of solid waste accumulation affects the tourism business. Butlers TALC linear model is intended to serve as a guide for individuals involved in tourism planning and development. This can inspire critical thinking as well as the creation of alternate and backup strategies. It contributes to the development of sustainable tourism practices.

2.2.1 Butler's Tourism Area Life Cycle Model

According to Butler (2006), the Tourism Area Life Cycle (TALC) Model is one of the most imperative models for sustainable tourism development, as it is used to describe what a destination is, understanding change in destinations and destination markets. Destinations become the crucial point for discussion. The TALC Model is used to direct the research for this study, including the structuring of the objectives, questions, questionnaire schedule, and target, as well as potential responses that may result from them and the development of the conceptual framework for this study.

The Theory of Waste Management, a coherent body of knowledge on waste and waste management, is based on the idea that waste management should discourage resource use optimization rather than allow waste to endanger human health and the environment (Pongrácz, 2004). This concept is applicable to solid waste management hierarchy. Shaw (1991) argues that when environmentalists, local government and businesses reach common ground about how waste minimization is beneficial in all contexts, the business however must bear major costs of changing the image (such as going green) of the business to retain the current market and attract the new ones.

An area utilized for tourism and leisure has six stages in its growth, according to Richard W. Butler's TALC (Tourism Area Life Cycle) model, which was published in 1980. These stages are exploration, involvement, development, consolidation, stagnation, decline, or rejuvenation (Ly, 2018:47).

Exploration stage: *A small number of adventurous tourists who are interested in nature and culture, close interactions with locals, word-of-mouth advertising, low impact on the social, cultural, and physical settings, and usage of local resources are the only criteria for visiting these regions.*

Involvement: *More visitors; still under local authority; some advertising; the start of the peak season and market; high levels of engagement; some modifications affecting social relationships and strain on facilities; local*

business owners begin to provide basic specialized services and facilities for visitors.

Development: *More foreign-owned facilities, a loss of federal oversight, the promotion of artificial attractions, extensive and concentrated advertising, improved accessibility, the use of migrant labour, and a rapid change in the landscape are all signs that the number of tourists is growing quickly until it equals or exceeds the local population.*

Consolidation: *Growth rate decreases; tourism is now a significant economic sector; extensive promotion; considerable opposition to tourism because of the overcrowding and high density of popular tourist destinations; product degradation; and facility abandonment.*

Stagnation: *Reached or beyond visitor capacity; reliance on conferences and repeat business; excess lodging capacity and management changes; emphasis on package tourism; ethical, ecological, and economic issues.*

Decline: *Loss of the tourist industry, a drop in vacationers, dependency on weekend and day travellers, conversion of numerous amenities, and hostility toward tourists among the locals...or*

Rejuvenation: *altered attractions; discovery of new tourism markets and products*

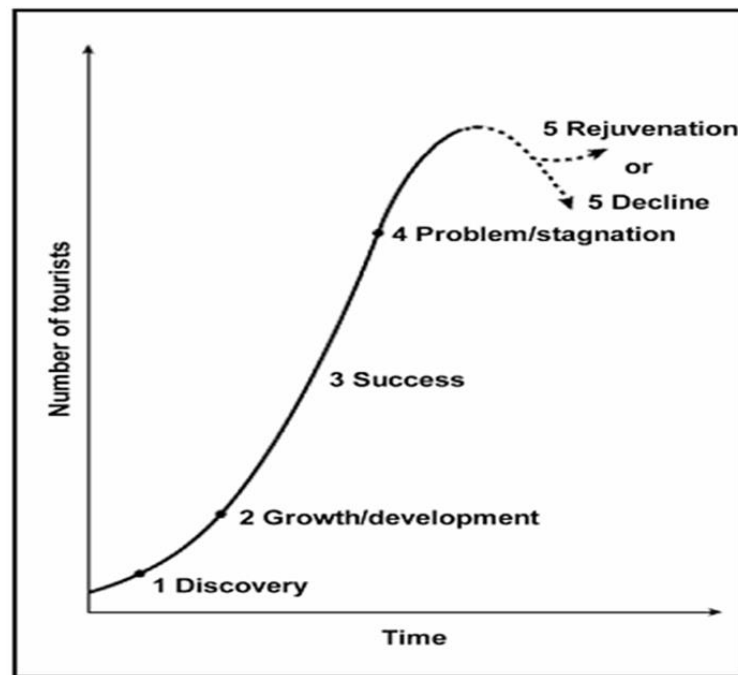


Figure 2.1: Butler's Tourism Area Life Cycle Model

Source: www.geographyfeildwork.com

It is imperative that this model is applied because it contextualises the theoretical framework, especially on the last stage where destinations have a choice of either decline, stabilize, or rejuvenate destinations. This is supported by reports made about the state of Pietermaritzburg CBD where it is declared as a decaying and rubbish dump by reporters and notable Ministers from the province (Ntuli, Ngcobo and Sinkins 2020).

This study takes into cognisance the stages (as depicted in the Figure 2.1) that the Pietermaritzburg CBD has undergone in its evolution cycle as a tourism destination, however, the emphasis is on the last stage where tourism in the city is evidently declining and in need for policy makers and all stakeholders to rejuvenate it. The TALC Model has been reviewed by several scholars and still found it to be relevant and applicable in tourism development in different regions of tourist destinations after 3 decades of its existence (Kruczek et al., 2017). Butler (2006) argues that tourism destinations hold the seed of their own demise, the trick is for better management of these destinations from self-destruct. The Figure above depicts the six stages of Butler's Tourism Area Life

Cycle Model. No matter how big a tourist destination is, Butler (2006) argues that it will undergo through all six stages of its evolution cycle, and the sustainability of the destination is greatly influenced by how well or poorly it is managed. This study argues that the Pietermaritzburg CBD as the tourist destination is mismanaged hence the Municipality has been under administration from 2018 and the study problem is addressed.

2.2.1.1 Proposed Concepts for Development

Twenty years after the publication of the TALC model, the concept was built to include eight characteristics, including dynamism, process, tourist absorption and capacity or development limitations, initiative factors, universal application, spatial components, long-term perspective, and management. Six years later, the concept was developed by compiling the experiences of other researchers using the model (Butler, 2000).

R.W Butler identifies eight distinct characteristics mentioned below (Oreja et al., 2008):

Dynamism— *The tendency of visitor activities to vary over time is one of their most distinctive features.*

Process— *a quality that enables a model-based view on growth and defines the changes happening in a tourism region.*

Tourist absorption and capacity or development limitations— *This strategy is built on the idea that the quality and value of the visitor experience will decline if the number of guests exceeds tourist intake and capacity.*

Initiative factors— *One element that affects change in a tourist destination is innovation.*

Management— *Even though they presume different features and resources, many of the components in some of these sectors lack administration. It is essential that a tourism destination's management receive full attention.*

Long-term perspective— *It is a sign of the effectiveness of efforts made to postpone the beginning of the decline phase as well as intervention efforts that launch a rejuvenation immediately after stabilization, which is typical of stagnation, when it becomes necessary to take a long view of an area's growth in its early stages.*

Spatial components— *It is suggested that the tourism sector be moved to regions where development is either just getting started or is still underway if development in a particular area slows down.*

Universal application— *The concept was developed for all different kinds of tourism sites, including specialized locations like eco-destinations and natural attractions.*

(Kruczek et al., 2018, Oreja, 2008 and Butler 2008)

The sixth stage in this TALC model is the focus of this study's theoretical framework and how this study uses what is known to draw up literature review and concepts.

The Decline and Rejuvenation stage are explicitly explained as individual scenarios for the tourism destination.

2.2.1.2 Stage 6: The Decline Scenario

In the decline scenario, the tourist destination has reached its tourism peak and the attractiveness of the destination is in decline. The destination finds it hard to compete with new tourism attractions and loses customers to other destinations. It is very likely to find that some tourism facilities have been replaced by non-tourism activities such as a hotel turned into a retirement home/ rental flat, or a museum turned into office spaces (e.g., Makrorie House Museum was converted into offices in the PMB CBD). Eventually, the city could devolve into a tourism slum or disappear entirely from the tourism business. The destination becomes reliant on day-trippers and weekends visitors from a small geographic area. The buildings are characterised by lack of maintenance and visible waste along the streets and recreational areas, with poor

management of other tourism facilities such as ablution systems (Butler, 2006). The study used this stage of the model to understand the stretch of the problem of waste accumulation and mismanagement, and its effect on the tourism business in the Pietermaritzburg CBD as a tourism destination.

2.2.1.3 Stage 6. The Rejuvenation Scenario

Rejuvenation requires for tourism destinations to change norms, standards, and management techniques (waste accumulation in this context). It also requires for a more proactive approach where innovative tourism facilities may be acquired and new tourism resources found (Butler, 2006). E.g., South African National Biodiversity Institute KZN Botanical Gardens located in Pietermaritzburg opened an Agrobranch in 2020 as a new attraction within their facility. This study further analyses some of the best rejuvenation mechanisms that all stakeholders may consider resuscitating the fading tourism attractions hype in the Pietermaritzburg CBD. Stakeholders are inclusive of government (which is responsible for policy making, development and public service delivery), tourism businesses (hotels, tour operators, museum, transports), tourists (who are highly blamed for contributing to waste) and local inhabitants (vendors, learners, business and retail personnel's and others).

2.2.1.4 Strength of a TALC Model

Destination is far from being a static location for the production and distribution of tourism activities. According to Ly (2018), the strength of the TALC model lies on this dimension. Over time, several factors cause its identity and positioning to change (Ly, 2018:48):

- *Customer segments, behaviour, and their buying patterns.*
- *Access to transport infrastructure and amenities*
- *Natural build of an area and environmental landscape*
- *Interactions and territorial decomposition of the area.*
- *Policies made by government and investment opportunities.*
- *Emergence of competition and substitute products*

These characteristics are particularly important for the conceptualization of this study in ensuring the study problem is identified and addressed. Contrary to the Theory of waste management, which does not cater to the needs of tourism, which is rather looking at waste as a by-product by humans and how it can be optimized to prevent harm from human health.

2.3 Conceptualisation of The Study

A conceptual framework is the one that the researcher believes best explains how the subject under study developed (Adom, Hussain and Agyem, 2018). It is related to fundamental theories, concepts, and empirical evidence used to organize and deepen the researcher's understanding (Peshkin, 1993). It provides an explanation of how the researcher would approach the research problem. The conceptual framework provides a thorough method for examining a situation (Liehr & Smith, 1999). The conceptual framework provides a logical explanation of how the major concepts in a study relate to one another. It is rationally laid out to make it easier to visualize how various ideas in a subject relate to one another (Grant & Osanloo, 2014). Figure 2.2 below depicts the conceptual framework for this study.

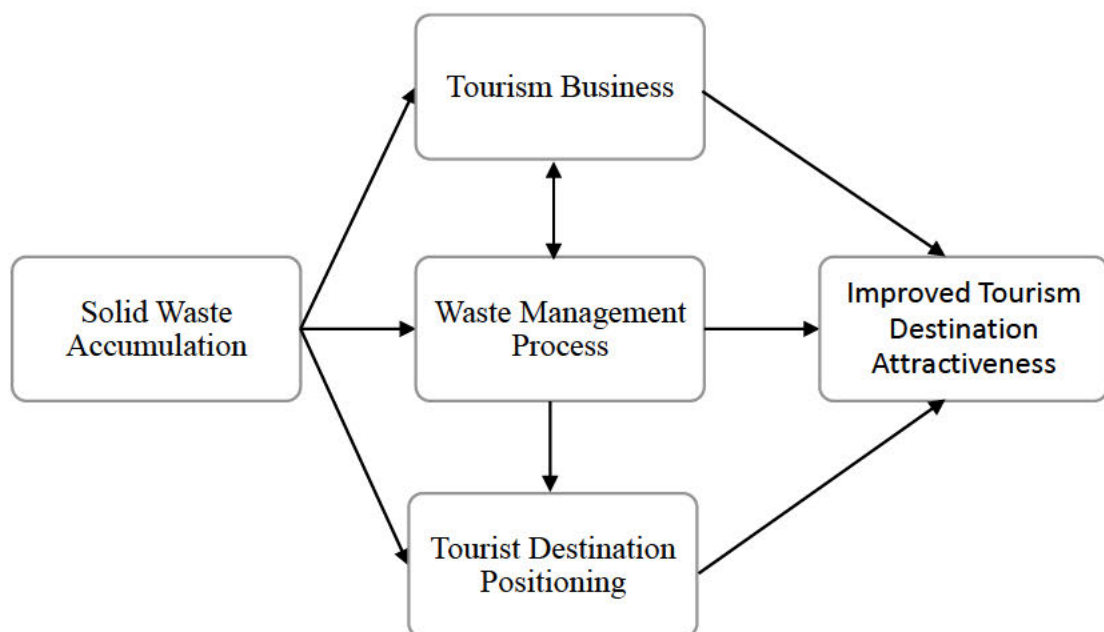


Figure 2.2 Conceptual Framework: Effect of Solid Waste on Tourism in PMB

Source: Author's own

The conceptual framework in **Figure 2.2** depicts the hypothetical study of solid waste accumulation as an independent variable, and its correlation to the dependant variables, the tourism business, waste management process and tourist destination positioning. Factors in which solid waste accumulation affects the tourism business includes but is not limited the TALC, the legislative framework, local municipal service delivery, decline stage of tourism destination, implications for sustainable development, policy development for improved service delivery, business loss, market disposition and infrastructure development. This has an implication on waste management processes adopted in the tourism destination such as waste management hierarchy and integrated solid waste management system, which determines the tourist destination positioning of a tourism business, and subsequently influences improved tourism destination attractiveness. The ontology is the philosophical stance on this conceptual framework, where constructivism is used as the study paradigm.

2.4 Conclusion

The first segment of Chapter 2 provided a full discussion of Butler's TALC model, as well as commentary on the significance of these aspects in this study. It brought into light the waste management theory which has contributions to this study but is limited due to that it does not take into consideration the dynamics of the tourism business. The strength of Butler's TALC Model was discussed with two scenarios laying a foundation for the importance of conducting this study. A conceptual framework was developed and discussed. The next chapter of this study reviews literature.

CHAPTER THREE

REVIEW OF LITERATURE

3.1 Introduction

Tourism has become a significant global economic and leisure activity due to its benefits and demand. As a result, governments engage in a variety of marketing and promotional efforts to attract more visitors (Gnanapala,2016). The attractiveness of a destination is the second most important element in deciding whether to visit. This aspect is linked to the atmosphere and environment of the city/destination, as well as its natural and cultural heritage assets. People visit cities for several purposes, including visiting friends and family, business, exhibitions, cultural attractions, sightseeing, entertainment, shopping, evening activities, sports, and special events (Tomic and Bozic, 2015). Tourism has provided a chance for many cities in recent decades to revitalize their fading economies by orienting their economic structure in service activities, the most notable of which is tourism to meet a diversified demand for urban tourism.

Since the 1970s, municipal tourism development has been viewed as a means of generating revenue and jobs in the city (Murava and Korobeinykova, 2016). Tourism is inextricably linked to other areas of the economy, making it difficult to develop tourism as a stand-alone industry. As a result, tourism, infrastructure, and superstructure amenities should all be created at the same time. Furthermore, increased facilities are desired by both tourists and inhabitants, and enhanced amenities represent the country's economic prosperity (Gnamala,2020). The Municipal Solid Waste (MSW) department, like any other service sector in metropolitan areas, must meet these tourism demands.

The negative effects of poor MSW management and the requirement to lessen the volume of this waste stream are major concerns for environmental management in most countries (Torres and De-la-Torre,2021).

This is particularly true in developing countries, where poor MSW management results in subpar sanitation, elevated public health hazards, and other environmental problems with MSW collection, warehousing, transportation, and landfill (Dlamini et al., 2017). A growing body of literature has documented efforts made by tourism-related businesses to reduce pollution and increase the sustainability of their organizations, including specific zero waste best practices. According to Yusof and Jamaludin, one of the most significant urban essential managements that affects a city's overall health and environment is MSW management (2013). Air pollution, hygiene concerns, waste management costs, and surface water contamination are just a few of the challenges that MSW mismanagement has caused for businesses. Regardless of these challenges, tourism businesses have been blamed by several scholars on their effort in minimizing solid waste within their businesses on notion that it is costly and time consuming, making waste management a governmental responsibility instead of the integrated responsibility (Zorpas et al.,2015).

Therefore, the first chapter of this research dealt with general introduction, where the background, aim of the study, problem statement, research questions and research method have been outlined. The second chapter of this study focused on the theoretical and legislative framework for this study, touching base the guidelines for SWM. The chapter further analyses the current integrated waste management strategy goals/objectives of the study areas. The current chapter reviews the literature on issues of MSW within a general perspective, drawing from different sources. Firstly, the chapter starts by defining the concept of waste, Municipal Solid Waste (MSW) management including its processes as well as waste generation and composition. Secondly, the chapter looks at the theoretical perspective of MSW problem. Thirdly the chapter redresses the Waste Management strategy by Msunduzi

Municipality. This chapter concludes by reviewing a few of the rules and regulations outlined in the South African National Constitution that control the country's waste management laws. These include the South African Constitution (Act 108 of 1996), the National Environmental Management Act (Act 107 of 1998), the Public Finance Management Act, No. 1 of 1999, and the issues of MSW and service delivery concerns with respect to South African municipalities, as well as several other pieces of legislation that all serve as the legislative framework for this study.

3.2 The Concept of Waste

Various researchers have diverse points of view on the concept of waste (Oeloftse and Godfrey, 2008; Nanda and Beruti, 2021). Waste, in general, denotes a lack of utility or value (Oeloftse and Godfrey, 2008; Nanda and Beruti, 2021). Human action produces waste as a by-product. It comprises the same components as useful items, but it is distinguished from valuable production by its lack of worth. It is commonly stated that re-establishing waste's worth is a vital approach for properly managing waste. The diverse and ambiguous composition of waste might be used to identify the lack of value (Nkubanzi, 2010). Waste can be categorized according to several criteria, including its physical state (solid, liquid, or gaseous). There are different types of solid waste, according to their original use (e.g., packaging waste, food waste), composition (glass, paper, etc.), physical characteristics (flammable, biodegradable, recyclable), source (domestic, business, agribusiness, industrial, and so on), and level of safety (e.g., hazardous, non-hazardous) (Nkubanzi, 2010; Nanda and Beruti, 2021).

The concept of waste because of human behaviour is emphasized in this study; yet the mismanagement and impacts of MSW accumulation on business are the key issue for the tourism industry.

3.2.1 *Municipal Solid Waste management*

MSW management is a fundamental service to society that compromises of storage, collection, transportation, and landfilling (IDP, 2015).. It is an essential

process by the municipality to manage different types/material of waste by different processes that will be outlined in this chapter.

Solid waste can refer to any type of useless material that has lost its value and use. The waste material dictates the type of management practices it requires. Landfilling being the primary option to waste management (Leblanc,2020). MSW management is a multi-sectoral concern where conservation, engineering, environmental consideration, aesthetics, economics, and the best practices for MSW management should be applied in adherence to all sectors and industries (Nkubanzi,2010).

The tourism industry is no exception, where is it is highly dependent on MSW management for destination attractiveness and business viability, also adhering to the best sustainable tourism principles in their business.

In metropolitan cities, solid waste is created by households, business, commercial, and medical services, and institutional exercises (Torres and De-la-Torre, 2021). Road refuse contains a combination of waste from numerous sectors since roads are utilized as unloading grounds by all generators of waste (Nkubanzi,2010). Where sanitation facilities are missing and animals wanders the roads, road refuse contains a ton of human as well as animals' faecal matter. Roads and pavements are regularly utilized for broad unloading of construction and debris which further attracts solid waste (Nkubanzi,2010).

The local municipal government oversee managing municipal solid waste. Waste generally comes from houses, offices, businesses, roads, streets, shops, public places, and hospitals. Industrial waste is not amongst the municipal responsibility however it needs to be considered when planning for waste management because it contributes to solid waste accumulation. MSW management is an essential service where whether people do pay or not, it is still necessary for solid waste to be managed for environmental concerns, public health and economic distribution and contribution (Nkubanzi,2010).

The problem of waste accumulation involves everyone, and it should be prioritized by all structures and substructures in government, public and private

sectors. It should be prioritized as not it not only affects sustainable development, but it will also have implications on economies of scale, public health, and infrastructural development. The sustainability of positive destination positioning of tourism businesses' image highly depends on proper MSW management.

3.2.2 *Waste Generation and Composition*

Solid waste is by product produced from all processes where different materials are exploited through extraction, manufacturing, consumption and even waste management. They all contribute to waste generation. The amount and composition of waste generated is highly dependent on the community setting/ environment, development, and state of the economy. With industrial waste contributing a higher per capita income, if not managed it will affect the environment and human health (Rand, Haukohl and Marxen, 2000: Naidoo,2009: Nkubanzi 2010 and Torres and De-la-Torre,2021).

Waste generation is a result of urbanization and global trade with material variation over decades (Nkubanzi,2010). Tourism is a services industry where people from different parts of the world, country or region come in to experience different services rendered by the tourism business, hence the emphasis of putting human and environmental concerns in MSW management planning.

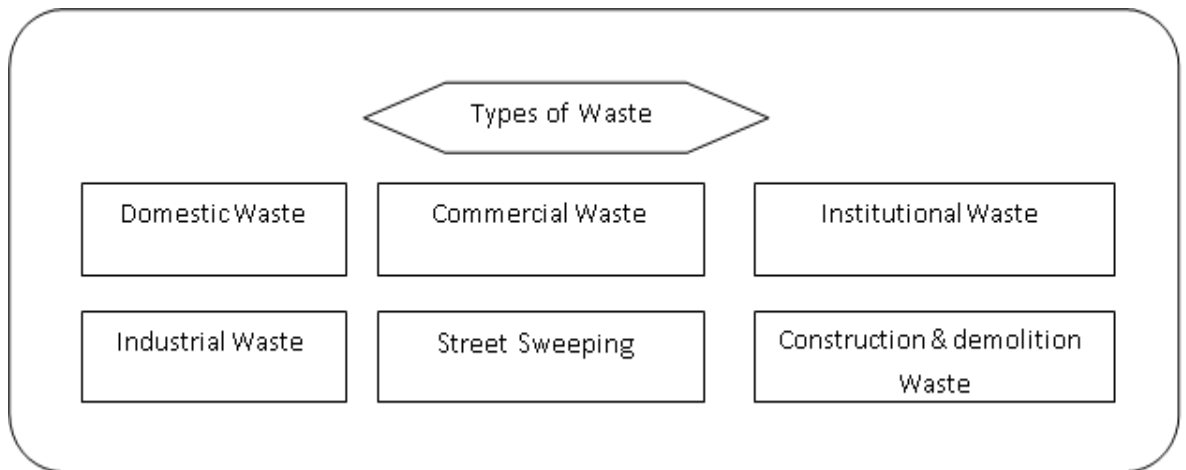


Figure 3.1: Typology of Waste Source: Model inspired by Rand, Haukohl and Marxen, 2000

3.2.2.1 **Domestic Waste**

Family activities, cleaning, fuel burning, outdated apparel and furniture, old utensils and hardware equipment, packaging, newspapers, and gardening debris all contribute to domestic waste (Yoda et al, 2014). Food waste and debris are most common in low-income countries. Paper, plastic, metal, glass, discarded objects, and hazardous garbage are more prevalent in middle and higher-income countries (Yoda et al, 2014).

3.2.2.2 **Commercial Waste**

This is waste produced by a region's economic operations. It is made up of packaging materials, office supplies, and food trash and resembles residential waste. It can be found at stores, offices, restaurants, hotels, and other similar business establishments (Tchobanoglous et al., 1993).. Food markets in low-income nations may account for a significant amount of commercial waste. Hazardous components in commercial waste include contaminated packaging materials and garbage from building, agriculture, industry, and demolition (Tchobanoglous et al., 1993).

3.2.2.3 **Institutional Waste**

This waste is from institutional buildings like schools, hospitals, clinics, offices of the government, and military posts. It includes both household and business

garbage, but often there is more packaging than wasted food (Ibid, n.d). Hazardous and potentially contagious compounds can be found in hospital and clinic waste. Separation of hazardous and non-hazardous waste is important in the reduction of possible infections and health risks (Ibid, n.d).

3.2.2.4. **Industrial Waste**

The type of industries that are involved in the synthesis of industrial waste is important. Mechanical waste includes food waste from kitchens and bottles, packaging materials, plastics, paper, and metals, as well as other types of residential and business waste (Nkubanzi,2010). Some manufacturing processes produce hazardous waste, which necessitates a whole separate method of disposal depending on the waste composition (Rand, Haukohl and Marxen, 2000).

3.2.2.5 **Street Sweeping**

This waste is composed of different waste matters such as dust and soil, papers, plastics, debris, metals, and any other discarded material that could be found on the streets. In developing countries, street sweeping is the main source of cleaning the streets, which includes drain cleaning, some domestic waste discarded along the roads, animals' faecal matter and other organic waste. (Tchobanoglous, et al, 1993).

3.2.2.6. **Construction and Demolition Waste**

This type of waste composition depends on the type of building material used, such as sand, bricks, cement, concrete and clay, wood, packaging, and others. It is generated mostly at construction sites and hardware areas. (Rand, Haukohl and Marxen, 2000).

3.2.3. ***Solid Waste Management Process in the Tourism Business in CBD***

In the lack of economically feasible alternatives, landfilling is widely acknowledged as a cost-effective and safe form of garbage disposal around the world. In South Africa, there has been a marked decline in the quality of

landfills operation and management, particularly at the municipal level, which has had a cascading impact and contributed to the loss in capacity and ultimate shutdown of these sites (McTaggart, 2019). Effective management and minimization of municipal solid waste (MSW) has proven to be a challenging task in many countries that calls for adequate institutional capacity, strict adherence to environmental laws and regulations, coordination, and collaboration between municipal governments, as well as raised public awareness among residents (Dlamini et al.,2017). Some of the most common methods for disposing of garbage include reducing waste generation, recycling, composting, incineration, sanitary landfills, disposal in oceans and seas, and plasma gasification, others of which are ecologically friendly and a few of which are not (Compactor Management Company,2020).

Source reduction, also known as waste minimization, is at the top of the waste management hierarchy, which is referred to as the solid waste management process. The most crucial prerequisite for any waste management strategy is that there should be less waste to handle (Pires and Martinho,2019). The alternatives after that, in some order of preference, include waste to energy, reusing, recycling, composting, combustion without energy conversion, and landfilling (Tsydenova et al., 2018).

In this chapter, it will be argued that while using this hierarchy to choose the best solutions does not always have the lowest environmental impact, it is valuable as a set of fundamental suggestions. The best method to handle the complete waste stream is to have a variety of waste management options because different waste materials respond better to different processes (Pires and Martinho,2019). As a result, there are several options that are suitable for various waste fractions; there is no one "best" or "worst" choice. This chapter investigates the complete waste management system to ascertain how it impacts the tourism industry, rather of relying solely on the waste management hierarchy. The following Figure 3.2 depicts waste management systems, including all processes from waste generation to land filling.

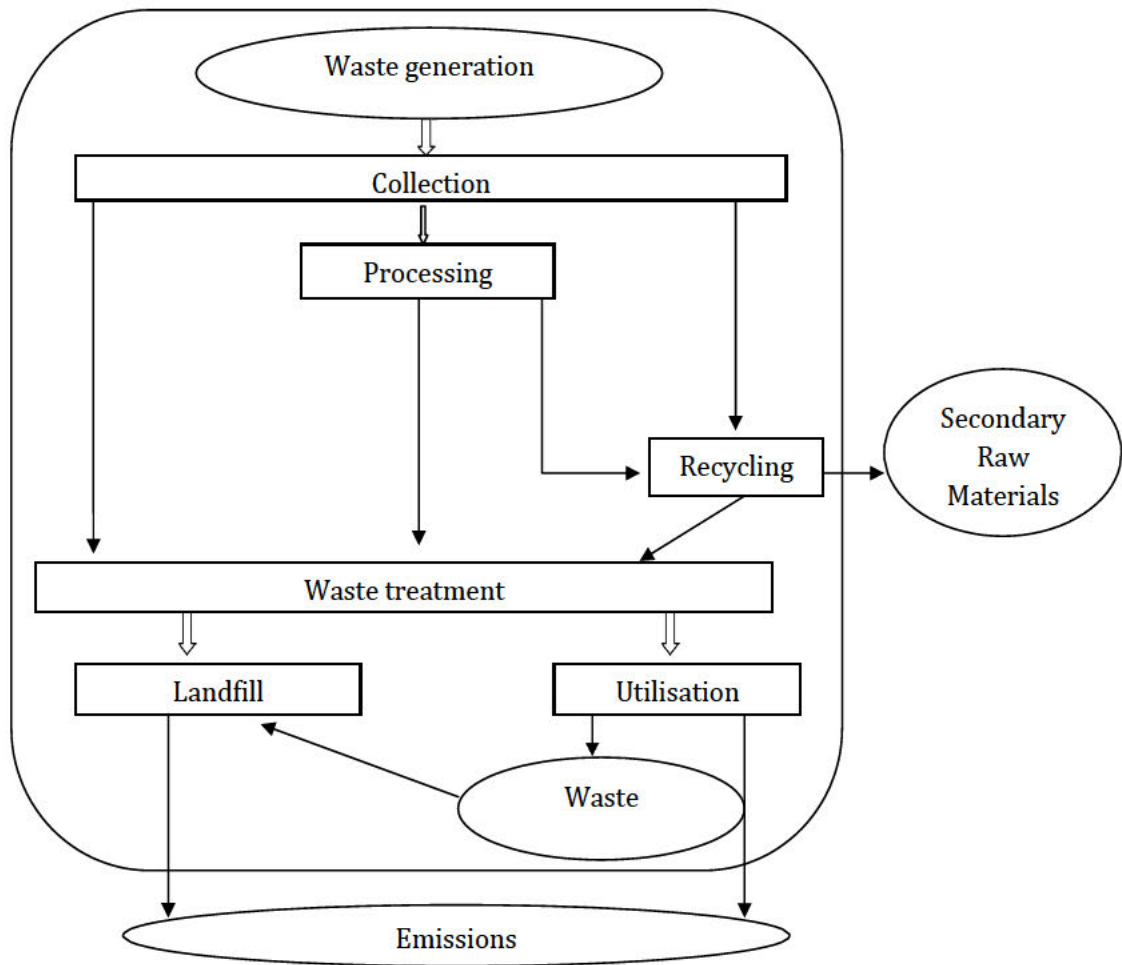


Figure 3.2: Integrated Waste Management System

Source: Sabbas et al., 2001

All waste management system processes, from waste generation to landfilling, are depicted in the above Figure . All processes that generate waste during the manufacture and distribution of products (industry and commerce) or during product consumption (households) are referred to as waste generation; waste collection, which involves source separation into various material streams; and processing, which includes waste sorting, product dismantling, and the manufacturing of Refuse Derived Fuel (RDF). All these steps serve to either prepare waste for reuse or to suitably modify waste characteristics in preparation for final land disposal; recycling is the production of secondary materials from waste, such as paper from wastepaper, steel from ferrous metal scraps, and so on; waste treatment includes a variety of technologies such as

thermal treatment, chemical treatment of hazardous wastes (Sabbas et al., 2001).

3.3. Solid Waste Management Problem

The first section of this chapter defined waste, solid waste, municipal solid waste, waste typology, and solid waste management techniques. This strategy is continued in the following part, which looks at and analyzes numerous solid waste management-related concerns. Modern civilisation has an inescapable side effect called waste (Ly, 2018). Procedures for managing solid trash were developed to prevent the detrimental health consequences brought on by the rising volume of solid garbage that was being discarded without being properly collected or disposed of (Pongrácz, 2004). The difficulty of more effectively controlling trash in modern society (Torres and De-la Torre, 2021).

Indeed, developing countries face a slew of issues when it comes to solid waste management. According to academics, solid waste management programmes are carried out in developing countries in partnership with private sector support organizations (Inanc, 2004; McDougall et al, 2008 & Torres and De-la Torre, 2021). Some efforts in poor nations have resulted in long-term advances in SWM. However, when external agencies stopped funding numerous programs, they were unable to sustain themselves or expand (Ibid, *n.d.*).

The failure to sustain projects is caused by a variety of technical, financial, institutional, economic, and social issues, which vary from project to project (Inanc, et al, 2004). Private finance approaches have recently been promoted for resolving waste disposal issues because the government sector in most developing countries cannot afford the high costs of effective waste disposal facilities (Inanc et al, 2004). As a result, Africa's high rate of urbanisation entails a quick accumulation of waste. Since the 1960s, most African countries have experienced social and economic transformations that have contributed to increases in waste generated per capita (Onibokun, 1999). Oelofse and Nahman (2018) argues that solid waste has become a major component of

urbanisation, modern lifestyles, and consumer behaviour, production, and transportation of the problem, and that no country can afford to ignore either the visible presence of solid waste or its influence on the wider environment and human well-being.

Furthermore, most towns in developing and underdeveloped nations do not collect all the waste generated, and only a proportion of the waste collected is appropriately disposed of. Insufficient solid waste management and disposal pose a risk to both human health and the environment by contributing to water, land, and air pollution (Inanc, 2004). Residents of areas without garbage collection, which are often low-income neighborhoods, either dump their trash in an open area, a creek, or a river, or simply burn it in their backyards. Uncollected trash may accumulate on the streets and clog drains during heavy rainfall, resulting in floods (Torres and De-la Torre, 2021). Runoff water can also carry waste to rivers, lakes, and seas, posing a threat to ecosystems (Inanc, 2004). This situation can be applicable to the central business district of Pietermaritzburg, where the uncollected waste appeared.

However, in the global South, the lack of suitable policies, enabling legislation, and an environmentally motivated and informed population is the fundamental difficulty with SWM (Ma and Hipel, 2016). Where government policies on the environment do exist, they are frequently fragmentary and poorly administered. Furthermore, state environmental authorities' efforts have been impeded by a lack of finance and inadequate infrastructure. The revised National Solid Waste Management Strategy 2020 was created because successful solid waste management in this country will require a comprehensive strategy that considers all the technology, economic, social, cultural, and psychological factors that are occasionally neglected in solid waste initiatives (Ma and Hipel, 2016).

According to Beukering et al. (1999), the rapid rate of urbanisation is causing an increase in waste generation, both solid and liquid. As a result, disposing of the waste becomes more complicated. The challenge is especially serious

in developing countries, where economic growth and urbanization are both accelerating. Effective waste management is necessary, however many cities in the South are hindered by inadequate financial resources and inadequate service delivery.

MSWM is a crucial public service that helps all local citizens and companies. Given the importance of public hygiene and waste management to environmental protection, company profitability and sustainability, and public health, it is not possible to restrict nonpaying customers from obtaining services. These characteristics make solid waste management a public good that is frequently controlled by local or metro governments (Muthukumar and Subramanian, 2017). This does not, however, imply that local government must handle solid waste collection exclusively with its own personnel, equipment, and funds.

In fact, this is where the private sector enters the picture. When considering solid waste management, the following significant difficulties must be considered: growing waste volumes; waste not reported in national municipal solid waste management totals; a lack of precise definitions for solid waste management terms and functions, as well as a lack of quality data (Tsydenova et al, 2018)

The degree of waste collection service varies significantly as well. Over 90% of the population now has access to waste collection services in most industrialized nations (Beukering et al, 1999). However, this is not the situation in less developed nations, where the lack of adequate collection services presents a serious threat to human health. However, it should be noted that a shortage of funding and a rising demand for urban services are obstacles to municipal services in developing countries (Beukering et al, 1999). The most typical technique of getting rid of solid waste, including hazardous waste, is still burial in controlled landfills, particularly in industrialized nations. Recycling and incineration are also significant factors in the management of municipal and industrial trash. In contrast, the most typical means of disposing of solid

trash in developing nations is unrestricted dumping or burning on public land or city streets. This frequently results in increased pollution and the loss of potentially salvageable economic value (Beukering et al, 1999). As a result of this circumstance, we must investigate concerns including dumping and landfilling sites, incineration, recycling and scavenging, separation and treatment of organic waste, and disposal.

3.3.1. ***Dumping and Landfilling***

Most cities in developing countries do not have adequate waste management. Only a small portion of the waste produced is collected, and a significant portion of the population lacks access to waste collection services. Systems for the transmission, recycling, and/or disposal of solid waste are ineffective in terms of the environment, economy, and finances (Osra et al., 2021). There are many problems on the site, including a lack of cover, a lack of leachate collection and treatment, inadequate compaction, poor site design, and a lot of pickers working there (Ibid). As a result, these dump sites are basically unregulated, posing significant health, safety, and environmental risks.

Given the, it may be argued that the most typical method of waste disposal in the developing world is the dumping of managed solid waste onto uncontrolled areas, which is a result of both technical and financial constraints. Because it offers little in the way of environmental or public health protection, this method of final disposal is unacceptable from a social and environmental standpoint (McDougall et al., 2008). Common side effects include spawning disease carriers, odours, and leachate pollution of surface and groundwater. Scavengers live in extremely unsanitary conditions in landfills and present serious current and future health risks (McDougall et al., 2008).

Solid waste disposal in most developing countries still involves dumping despite the numerous issues that come with it. This is especially true for reasons like lack of knowledge of the health consequences associated with waste dumping, acknowledgement of the status quo due to a lack of resources to change things, or a lack of political will at all levels of government to protect

and improve the environment. Illegal dumping occurs when solid trash is disposed of without consideration for environmental or health consequences (Osra et al., 2021).

Waste disposal to landfills is typically the most economical option, even in modern countries where landfills are frequently meticulously built and contain several liners on the bottom of the landfill. The most financially feasible option for improving waste management in emerging countries is to move away from a dumping system and toward one based on sanitary landfills. Even if highly developed facilities are unlikely to be given, simple, inexpensive alternatives might be (McDougall et al., 2008). Therefore, according to Osra et al. (2021), most landfills in poorer countries, especially in Asia, are simply large but shallow holes in the ground filled with trash, whereas sanitary landfills in wealthy nations are intended to be created with optimized and implemented top and bottom liners systems. According to them, rather than taking hydro-geological analyses into consideration, many of these landfills have been constructed in environmentally fragile marshlands, abandoned mines, and river bottoms.. As a result, landfill sites must be chosen based on a set of hydro-geological parameters, with a focus on rainy conditions.

Scavengers on landfill sites are an issue at many dumps, as they are exposed to a variety of risks from landfill debris as well as gas emissions, which often contain harmful trace components. Scavengers must leave the landfill site, and new ways of incorporating people in the recovery of materials from waste must be devised in places where the conditions are more favourable. In financially strained conditions, suitable dump locations can greatly lessen the dump's environmental impact. Frequently, waste is tossed into rivers, lakes, or downward, causing massive environmental concerns and possibly compromising the dump's mechanical stability (Stegmann, 2005). This situation is prevalent in developing countries.

Nonetheless, open dumping is the primary technique of municipal solid waste disposal in developing countries' cities. Landfill locations are frequently

swamplands or low-lying places, with garbage used for land restoration. Surface water and groundwater are heavily polluted because of improper land filling or dumping. Even though clay liners are occasionally utilized, the water table, groundwater pollution, and gas migration are given little thought (Stegmann, 2005). Hazardous, biomedical, and slaughterhouse wastes are rarely disposed of in a controlled manner, however some portions of dumps are normally designated for slaughtering and biomedical wastes. Wastes are illegally thrown in a variety of water bodies, particularly by areas that do not have access to municipal waste pickup (Inanc, 2004). However, as previously indicated, most existing solid waste landfill sites in developing nations use either open or controlled dumping. Due to technological and economical constraints, proper sanitary landfill designs are rarely fully implemented. Implementation of a properly engineered sanitary landfill is required, as is a more cost-effective landfill design, especially for developing countries (Chong, Matsufuji, Hassan, 2005; Osra et al, 2021).

Finally, landfills ought to be situated on soils with a limited permeability, such clay, and far from waterways and densely populated areas. Filling should be performed cell by cell, and if possible, a cover material should be applied at the end of each working day. When possible, organic waste and recyclables should be separated before being dumped, and the dump site should be walled off or otherwise set up to deter trespassers. If these actions are taken, many dumping-related challenges are likely to be lessened or eliminated (McDougall et al., 2008)

3.3.2. *Incineration*

In recent years, there has been a growing push to use incineration to dispose of waste. The necessity to recover energy from garbage, along with the challenge of finding suitable dumping sites, has sparked a lot of interest in this method (Cudjoe and Acquah, 2021). Furthermore, municipal waste is being examined as a backup fuel for existing fossil-fuel power plants and for industrial process steam needs (Ibid). According to Cudjoe and Acquah, (2021), incineration is an important part of garbage management in many

countries throughout the world. In comparison to direct landfilling, the relative importance of incineration varies significantly from country to country (Cudjoe and Acquah, 2021). In nations where land filling space is scarce or inaccessible, incineration is generally the chosen choice, according to Makarichi et al., (2018). Some nations that burn at least 50% of their non-recycled waste include Switzerland, Japan, France, Germany, Sweden, and Denmark; some of these nations have even implemented laws forbidding the further land filling of flammable waste (Makarichi et al., 2018). There are two different kinds of incineration facilities: refuse-derived fuel, which burns municipal solid waste as it is received rather than pre-sorting it to remove glass and ferrous metals and produce waste with a higher calorific value (Yang et al, 2021).

The preceding statement can be described in this way: on the one hand, incineration decreases waste volume while odour and leachate concerns are avoided. Furthermore, this is a sanitary form of MSW treatment that does not produce biological issues. Incineration, on the other hand, has some drawbacks when compared to land filling. Incineration consumes a lot of energy and generates a lot of fly and bottom ash (Cudjoe and Acquah, 2021). Although incineration provides energy and reduces the amount of municipal solid trash, it is not a long-term solution because it leaves behind bottom and fly ashes that must be disposed of later. A substance resembling slag that has accumulated at the combustion chamber's bottom is known as bottom-ash. The most significant environmental issues are brought on by the finer portion, known as fly ash, which is extracted from flue gas by Air Pollution Control (APC) systems (Makarichi et al., 2018).

However, the heavy metal problem is frequently described in general terms in public debates about waste incineration plant emissions, ignoring the possibility that individual heavy metals may occur in widely disparate individual quantities and thus have disparate effects in different emission systems (Yang et al, 2021). The issues with coal combustion cannot be compared to those with refuse incineration, and the issues with heavy metal emissions throughout

the melting process are significantly different from those with coal combustion. According to their proportions in the residual gas, a few components specific to each process play a significant role in emission management (Yang,2021). All these problems might affect the ecosystem, if not public health.

3.3.3. ***Recycling and Scavenging***

The search for proper collection, treatment, disposal, or reuse of home waste is a serious concern for engineers and scientists in developing countries (Polprasert, 2007). As people become increasingly aware of the pollution problems created by unmanaged waste generation and disposal, solid waste recycling is becoming more widespread in industrialized countries (Rosa and Cerilli, 2018). Solid waste generation is becoming a severe environmental issue not just in industrialized countries, but also in developing countries. Until recently, dumping was the only technically and economically viable alternative for dealing with these pollutants. Because of its economic impracticality and low quality for use as a raw material in production, resource recovery and recycling technology was not investigated (Igwe et al., 2018).

However, the time has come to examine recycling as a viable alternative to disposal for the following reasons: first, current waste management systems are insufficient to prevent major environmental degradation (Igwe et al., 2018). second, limited and expensive resources must be conserved (Ibid). Furthermore, most developing countries have completely overlooked the opportunity of integrating organized and sanitary scavenging for resource recovery and recycling (Igwe et al., 2018).). People scavenge at several points along the municipal solid waste management process. High-quality recyclables, such as intact glass containers, plastic containers, and metals, are commonly collected door to door by individuals or waste collectors (McDougall et al, 2008). People searching through garbage cans and scavengers at the dump or trash are also skilled at sorting recyclables at the curb side. This scavenging litter is the most dangerous to one's health, symbolizes the lowest living conditions, and hence is the most immediately in need of change (McDougall et al., 2008). Furthermore, scavengers and

animals wreak havoc on garbage disposal sites, causing even more pollution and disease spread. These observations have been made in several developing country cities (Rosa and Cerilli, 2018).

Dump scavenging is dangerous to the public's health since rubbish pickers are vulnerable to cuts from glass and sharp objects (Igwe et al., 2018). Additionally, in high-income areas, domestic helpers are generally responsible for recovery; they add to their income by selling the materials to intermediaries. Salvaged metals, particularly aluminium, are sold to small-scale recyclers who use them to create usable products like lamps, cooking pots, and washing pans. Scavenging takes place in open containers and in dumping grounds. Rubbish pickers risk losing their jobs by collecting trash from inbound trucks at dump sites as well as from public container sites (Schenck, 2019).

Furthermore, as the cost of raw materials rises, recycling provides a more cost-effective supply of raw materials for industrial businesses. This has provided value to previously worthless municipal solid waste, encouraging people to take another look at it before deciding how to dispose of it (Rahman et al., 2017). Sorting and separating MSW is becoming increasingly important in a variety of industries. A visit to a MSW dumpsite reveals frantic digging for recyclables among the waste. Initially, scavenging was motivated by poverty and a desire to make a living, but the rise of recycling companies has boosted the search for recyclable materials in landfills (Rahman et al., 2017). But the danger is not simply about the health risks linked with solid waste management.

3.3.4. *Separation and Treatment of Organic Waste*

Nowadays, waste management is a major concern in both developed and developing countries. Organic wastes, such as used rubber and plastic, are examples of waste products that, on the one hand, are troublesome wastes but, on the other hand, have tremendous potential as secondary raw resources.

It has become critical to employ appropriate technology for resource recovery from non-conventional sources such as organic waste to mitigate some of our environmental damage (Igwe et al., 2018).

Separating organic waste from MSW offers a way for poor countries to reduce the amount of refuse that ends up in landfills. The proper treatment of this refuse would also help to prevent pollution and health issues. Prior to collection, organic waste can be sorted at the household level, followed by final disposal at the landfill, or a mix of the two. Households need to be encouraged to collect organic garbage if they are to operate at a high degree of efficiency. Only if the source separation is easy, hygienic, and practical can householders' effective separation of organic material be maintained (McDougall et al, 2008).

3.4 Msunduzi Municipality's Solid Waste Management Plan

The dedication of South Africa to sustainable development seeks to protect natural resources while balancing the larger social and economic challenges associated with being a developing nation. This includes waste minimization, product design, raw materials, resource efficiency, and prevention when avoidance is impractical in the case of waste materials in South Africa. Waste accumulation is increasing in South Africa because of rising urbanization rates, population growth, and economic development, all of which necessitate the implementation of appropriate waste management programs and laws (ANVASS,2020). The waste business is transitioning to a circular economy, where garbage is seen as a secondary resource that can be exploited for material recovery, recycling, and reuse in addition to energy recovery (Oelofse and Nahman, 2018:4). By increasing recycling and reducing reliance on sales, modern waste management strives to alter the waste hierarchy. Msunduzi Municipality uses a Waste Management Hierarchy as the framework to manage waste, derived from the National Integrated Waste Management Plan (IWMS, 2014).

The supply of public services, including waste management, falls under the purview of the local municipality of Msunduzi. The municipality's Waste Management Business Unit (WMBU) oversees carrying out all waste management operations (IWMS, 2014). The municipality's vision statements speak highly of being seen as accessible, clean, green, and economically viable city (IDP,2020). However, there are drawbacks to service delivery especially the WMBU because there is lack of equipment and staff. The high rise in population number in the municipality has had limitation in the provision of proper waste management in the municipality, where even with the population numbers increasing, the working-class numbers has not changed or improved (IWMS, 2014). The municipality lacks funds to carry out service delivery activities and meet demands for waste management in the whole municipality, making it difficult to achieve this vision (IDP,2020).

The objectives/ goals outlined in Integrated Waste Management Plan (IWMP,2014) shed light on what the municipality has planned in its Integrated Development Plan (IDP) with regards to waste minimization and management, adhering to the NWMS and NEMWA for a cohesive implementation.

3.4.1 *Goal 1: Promote recycling and recovery of waste.*

The objective of Goal 1 is to increase recycling rates in council-collected residences and businesses to reduce the amount of recyclable material going to landfill by at least 10% per annum. Where appropriate, the municipality will assist in the creation of Material Recovery Facilities (MRF) by creating at least 8 buy-back centres by partially converting existing garden waste sites. Examine waste-to-energy possibilities by establishing a Gas-Energy plant. Further, expand the recycling system to non-council-collected businesses by law, enforcing recycling by businesses. Recycling of all garden waste and facilitate electronic waste (e-waste). The amount of business waste going to landfill is decreasing, owing to a higher awareness of recycling and the negative consequences of waste on businesses (IWMP,2014).

3.4.2 Goal 2: *Ensure the effective and efficient delivery of waste services.*

Goal 2 does not explicitly explain how effective, and delivery of waste services works around the areas of business such as the CBD, it just states that the municipality is willing to increase the number of door-to-door waste removal at households by allowing co-operatives to collect and recycle once a week (IWMP,2014).

3.4.3 Goal 3: *Ensure that legislative tools are developed to deliver on the Waste Act and other applicable legislation.*

Goal 3 denotes that the municipality wants to effectively report on the South African Waste Information System (SAWIS) by gathering, sorting, compiling, analysing, evaluating, and reporting waste management information. Also, review waste management by-laws where a customer will have a printed copy of by-laws (IWMP,2014). The WMBU is currently understaffed to do this, as shown in the organizational structure. With the help of an intern, some effort was made to ensure that most daily collection figures are gathered, sorted, recorded, and presented. The data is entered into the SAWIS once the practice has been developed, compliant, and trustworthy (IWMP,2014)

3.4.4 Waste Management Hierarchy

The waste management hierarchy is a global and national approach for ranking waste management techniques to achieve the greatest possible environmental results. "It describes the ideal order of waste management procedures, from most to least desirable." The waste hierarchy aims to maximize value while producing the least amount of waste possible. When properly applied, the waste hierarchy can have several advantages. It can help with job creation, pollution reduction, greenhouse gas emissions reduction, energy conservation, resource preservation, and the development of green technology (DEA, 2017:27). The waste management hierarchy is a methodical, comprehensive approach to waste management that includes safe disposal as a last choice as well as reduction, avoidance, reuse, recovery,

treatment, and recycling throughout the waste life cycle (DEA, 2011: 6; DEA, 2012:279). The waste management hierarchy, the overarching framework that directs waste management in South Africa, serves as the framework around which the Waste Act's objectives are arranged (DEA, 2011:6). The waste management hierarchy, as stated above, is depicted in Figure 3.1.

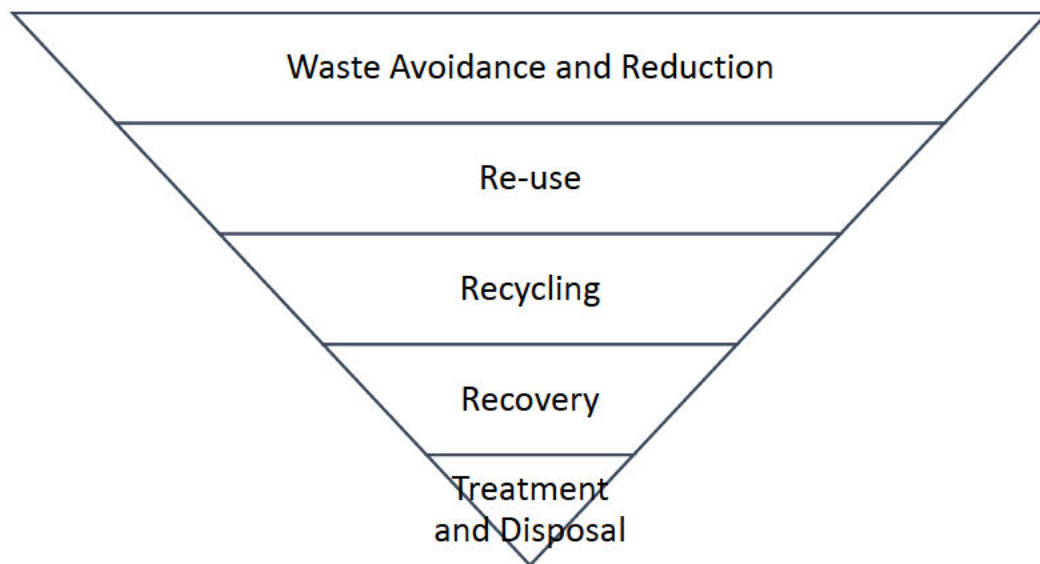


Figure 3.1: Waste Management Hierarchy

Source: Van Jaarsveldt, 2016:16

3.4.4.1 *Evaluation of The Waste Management Hierarchy*

The following major features of waste management hierarchy are highlighted (DEA, 2011:19; DEA, 2012: 279):

- **Avoidance and Reduction:** It is necessary to design materials and products that utilize less resources in manufacturing, create fewer waste components, and generate less waste both during production and after usage.
- **Re-use:** Materials can be used in many ways while retaining their properties and shape. This tactic tries to reuse a product or substance after it has served its purpose. As a result, it starts to produce new products and materials.

- Recycling: This includes separating resources from waste streams and processing them as raw materials or finished goods. The first aspects of the waste management hierarchy provide the cornerstone of the 'cradle-to-cradle' waste management method.
- Recovery: Certain components or materials can be recovered or utilized as fuel.
- Treatment and disposal: This are a "last resort" according to the waste hierarchy. The act of treating garbage involves altering its physical characteristics or eliminating any dangerous components. The act of excavating or disposing of rubbish in or on soil is referred to as "disposal." Consider landfill disposal as an example.
- Legal: The NEMA's principles of environmental justice and equal access to environmental services must be followed when treating waste.

There are several advantages to using the waste management hierarchy, according to (Oelofse and Nahman, 2018:5):

- Reusing, recycling, and waste reduction minimize the environmental and social costs (externalities) associated with landfills (such as odours, health risks, pollution of water supplies and soil, aesthetic appeal, reduced value and availability of land, emissions of greenhouse gases and so forth).
- By decreasing waste and reusing it, the environmental and social costs associated with waste disposal and collection can be decreased.
- Energy recovery and recycling help to create jobs and boost overall economic growth, as well as promote improvement and new business prospects.
- Energy recovery and recycling encourages people to recycle energy or valuable resources and reintroduce them into the economy. These materials may be used in the creation of new goods.

By moving up the hierarchy after re-use, recycling and recovery promote the values of a sustainable economy in several ways, including Encourages the development of new jobs and economic expansion (DST, 2014:2). (DST,

2014:2). There will be a net increase in employment levels as a result (DST, 2014:25); lower costs for the society and the environment (DST, 2014:2).

The hierarchy has a long history as a rule, particularly in the context of business. Sustainability goals should consider complex interactions across systems (economic, social, and physical systems) and repercussions rather than concentrating on issues (such as energy and waste). New product policy trends and ideas such as life-cycle assessment, corporate development, eco-efficiency, and eco-innovation are also rapidly developing. Examples of these technologies include commercial composting and gasification (Gertsakis and Lewis, 2003).

3.4.4.2 Implementation of The Waste Management Hierarchy in South Africa

South African waste policy is informed by and influenced by the fundamental components of the waste hierarchy, which establishes the basic management strategy to waste management (DEA, 2012). The National Environmental Management: Trash Act (No. 59 of 2008) (NEMWA) has been updated to include additional requirements including waste recycling and minimization to implement the concepts of the waste management hierarchy in South Africa (GreenCape, 2016).

All government businesses in South Africa were required to comply with the waste management hierarchy's goals following the implementation of NEMWA in 2008. (GreenCape, 2016). To fulfil the requirements of the National Environmental Management: Waste Act 2008 (Act 59 of 2008) and to establish framework for debating waste management issues in South Africa, a National Waste Management Strategy (NWMS) was created in 2011. (Van Jaarsveldt, 2016). The National Waste Management Strategy in South Africa has embraced the waste management hierarchy to ensure the best service delivery as the economy grows because of greater business development and job creation (DEA, 2011; DEA, 2012; Green Cape, 2016 and IWMSA, 2017).

The Waste Management Hierarchy was developed by the Environmental Protection Agency (EPA) as a framework for identifying the waste

management tactics that will have the least negative effects on the environment. This is the groundwork that South Africa has set to collaborate with other countries to address the world's waste management concerns (IWMSA, 2017).

The waste management hierarchy includes alternatives for waste management throughout the waste life cycle. All parties involved in the waste management process must adhere to the waste management hierarchy (DEA, 2011:18). The Waste Act requires waste containers generally to avoid waste and, if that is not practicable, to reduce the amount and toxic waste generated (DEA, 2011:21). They then must recycle, reuse, or retrieve the trash. A few of the tools in the Act that impose this duty of care are integrated waste management plans, standards and guidelines in waste management plans, prioritized waste, and extended producer responsibility. Industry and the government will work together to implement a waste minimization programme that outlines the numerous regulations and classifies the goods and services that fall under their purview (DEA, 2011:21).

A method for meeting the objectives of the NWMS and NEMWA is to create integrated waste management plans (IWMPs) (DEA, 2012:299). A paradigm shift results from IWMPs, which help ensure that waste management in the municipality adheres to the waste management hierarchy (DEA, 2012:299).

In a perfect world, source reduction would take precedence in waste management; if less garbage is produced, less waste should be disposed of. "Reducing waste at the source at the beginning of the product's life cycle" (IWMSA, 2017:2). Recyclability, better material selections, reusability, and biodegradability all increase manufacturing responsibility by putting pressure on the maker. Extended Producer Responsibility (EPR) is a controlling mechanism in the National Environmental Management: Waste Act (59 of 2008), and it is used as a controlling mechanism in that Act (59 of 2008) (NEMWA). It is crucial that we abide by such laws that make the first two stages of the waste management hierarchy essential (IWMSA, 2017:2). Materials that

are already wasted to the South African economy are worth less because they are discharged as garbage. Understanding the value and significance of resources lost to the South African economy enables organizations (business and government) to have an informed discussion about the financial advantages of moving up the hierarchy (DST, 2014). Both the NEMWA and the NMWS are built around the waste hierarchy. The complete waste hierarchy must be included in all integrated waste management programs (Van Jaarsveldt, 2016).

Limiting the wasteful use of raw materials and promoting waste prevention, sustainable packaging design, and resource efficiency are required. This is reusing products whenever possible and preserving product value by decomposition, thermodynamic efficiency, or recycling once they have served their purpose (Van Jaarsveldt, 2016). Although complete trash elimination is impractical, within the next few decades it is conceivable to arrive at a point where landfills will no longer be the preferred method of waste management and will instead be replaced by recycling, re-use, treatment, and recovery (DEA, 2011).

3.5 Negative image positioning regarding waste accumulation in CBD that may affect tourism business.

Local municipalities have an obligation to deliver public services such as waste management to the people because they are the closest sphere of government to the residents and businesses of all three governmental spheres. This allows for the proper functioning of the public and business areas, and it fosters traction for tourism by creating a positive destination image.

3.5.1 *Waste Management Business Unit at Msunduzi Municipality*

The Waste Management Business Unit (WMBU) is the department within the municipality that is responsible for the implementation of all waste management plans and by laws, and foreseeing all waste related activities such as collection, disposal, and education.

The Business Waste organogram was approved to run business waste in accordance with professional, international standards, establish waste information standards, increase productivity, and reduce expenses (ISWM,2014). The structural roles of foremen containers and container maintenance have remained unfilled to date. As a result, precepts such as data gathering, processing, and analysis are lacking, resulting in a lack of proactive planning, and organizing. (Mhlongo,2021). There is currently no available data to show why the Landfill and Recycling structure was approved. The municipality has been using the Integrated Waste Management Plan 2014-2018 and is yet to be updated (Mhlongo, 2021). Which is a shortfall considering that the NWMS 2020-2030 has been updated.

Due to the vacant area-based foreman jobs and the absence of imperatives such data collection, processing, and analysis, there has been no proactive planning, organizing, or management for the residential waste system. Given that the co-operatives are about to be implemented, the foreman roles are essential (IWMS,2014). The structure of illegal dumping is particularly problematic because there are open driver positions and not enough appropriate collecting trucks (IWMS,2014). The business unit runs the danger of experiencing significant backlogs in the collection and removal of illegal dumping if these open posts are combined with the open peace officer and administrative roles (IWMS, 2014).

The organograms in the IWMS clearly indicate that without personnel in key positions such as foremen, it becomes a challenge to appropriately manage waste in all levels on the department, which results in backlog of service delivery and subsequently affecting the municipality's positioning as a suitable tourism destination. Without leaders, general workers cannot perform to their maximum best because there is no one to head the ship in the right direction. There is also a challenge of unqualified labour occupying key positions which affects the implementation of services and workflow (IDP,2020), hence the importance of this study.

3.5.2 Local Government and Service Delivery

Van der Waldt (2014) defines local government as the level or domain of government established to bring government to local communities and provide citizens a sense of participation in political processes that have an impact on their lives. Additionally, local administrations or municipalities were founded to provide products and services. A municipality is the area under the jurisdiction of a local government (Ndebele and Lavhelani, 2017). In other words, municipalities are local government organizational units responsible for ensuring that all citizens have access to basic services (Olson 1969). Authorities are also expected to promote socioeconomic advancement, local community democracy, and the removal of Apartheid's legacy in conjunction with local governance (Nkomo, 2017). The provision of services has been at the top of the list when it comes to governmental activities; the constitution specifies that municipalities are responsible for providing these services. The provision of effective and sustainable community services is one of the goals of local government, as stated in Section 152(1)(B). According to Nealer (2016), service delivery includes both direct and indirect services and is defined as the provision of community activities, benefits, or satisfaction.

Numerous issues now confronting South African municipalities have slowed down the implementation of the law's requirements for service delivery (Sithole 2015). Local government is consequently regularly overwhelmed by public or service delivery demonstrations, which not only hinder efficient public service delivery but also highlight significant faults in local governance.

3.5.2.1 Service Delivery Protests

During the apartheid era, local communities used service delivery demonstrations to create community-based organizations and social movements to oppose the apartheid system (Reddy 2016:4). However, they have also become more well-known in South Africa, a democratic country. In fact, since 2004, local government has experienced regular public service delivery protests, which have over time gotten more violent and destructive. Nkomo (2017:3) also references municipal IQ (2017), a research company that compiles data on protests involving service delivery inside municipalities, which showed that between 2004 and 2016, the nation experienced an average of 94 protests year. The fact that there were 144 protests in the first half of 2019 indicates that the public is unhappy with the level and quality of service delivery, according to Toxopeus (2019).

There have been several different types of protests the delivery of services; some have been peaceful, others have been violent, and some have begun quietly before turning violent. Since the end of apartheid, there have been violent protests in South Africa. In the presence of extreme inequality and poverty, democracy encourages a climate where violence is seen as a viable option, according to Pietersen (2014: 108) citing Van Holdt (2013). When public property is damaged during protests, such as by burning tires and other infrastructure, it is deemed violent (Breakfast, Bradshaw and Nomarwayi, 2016:416). Additionally, according to Mphehle (2012: 221), violent protests service delivery had expanded throughout South Africa by 2009.



Figure 3.3 and 3.4 depict the during and aftermath of service delivery protests

Source: The Witness (Sinkins, 2021)

South Africans believe that violent protest is much more effective than non-violent protest, according to Muller et al., (2017). In addition, Karamoko (2011: 11) notes that although there have been fewer community protests, they have grown more violent. Residents use violent protest as a form of public involvement to voice their unhappiness with service delivery initiatives since it is considered that public involvement instruments are useless (Nembambula, 2014: 149). According to Hough (2008:6), people will engage in violent protests to voice their displeasure with a range of topics, including the way services are provided.

In addition, protests turn violent, according to Netswera (2014) since they can attract national and worldwide media attention while also pressuring authorities to act swiftly to meet their service delivery needs. Other factors that contributed to protests turning violent included dissatisfaction, a lack of responsiveness from government municipalities, and, in some cases, police intervention (Banjo and Jili, 2013).

Nene (2016) further claims that protests service delivery are frequently violent and involve tyre burning, blockages, and stone-throwing. The protests have grown more violent, resulting in clashes with the police, destruction of both public and private property, and occasionally , casualties. Since these protests disrupt not only the delivery of public services but also have significant economic repercussions, such as damage to infrastructure and, a loss of investor confidence due to perceived socio-political unrest, the nature and frequency of such protests require that the government respond more effectively.



Figure 3.6: Visible over piling waste bins at the street in the PMB CBD

Source: City Press- Poloko Tau, 2021

Service delivery is disastrous in every department at Msunduzi with the staggering growth of the economy it makes operating the municipality extremely difficult (Khoza, 2019). Additionally, concerns about the state of Pietermaritzburg's municipal services and the KwaZulu-Natal Province's tourist attractions were expressed. Given its history, Pietermaritzburg ought to have drawn a lot of tourists to the KwaZulu-Natal Province. Dr. Blade Nzimande was reported as saying, "It was a waste dump at present and needs to be cleaned up" (Ngcobo, 2015:1) (Minister of Higher Education, Science and Technology).

"You're expecting tourists to come here and see what, dirt?"- said Deputy Minister for Public Service and Administration, Sindisiwe Chakunga as quoted by (Ntuli, 2020:1). Tourism professionals have been trying to get the city's attention to try and minimize solid waste accumulation, the lady by the name Ursula Brown was quoted by Sinkins (2020:3), *"it's time for this municipality*

and all government departments located in, apparently, the CAPITAL CITY of KwaZulu Natal, aka Pietermaritzburg, to read the ops manual and remember that tourism is everybody's business". There have been concerns on the accumulation of solid waste littering and dirt at Msunduzi and it is also notable that the problem does not only exist in Pietermaritzburg, but it is all over (Ngcobo, 2020). Service delivery is the main reason for the state that Pietermaritzburg is finding itself in as a tourist destination, hence poor MSW management.

The causes of these protests are a combination of socioeconomic and political factors, according to researchers, who also feel that public service delivery protests represent a variety of infrastructure problems in local governments. Matebesi and Botes (2018) claim that in addition to the perceived tardiness of service delivery, poor service quality, patronage and exclusion politics associated with its supply are also to blame for these protests. Service delivery protests reflect or spark several other flaws that obstruct service delivery and contribute to growing public dissatisfaction with local government (Sithole 2015).

3.5.2.2 Skills Shortage

One of the most common obstacles to the effective delivery of core services in local government is a lack of capacity or skill. In general, a skills shortage happens when there is a gap between the supply and demand for a certain service (Daniels 2007). Therefore, a skills deficit in South African local government relates to the fact that some municipalities are now understaffed, making it challenging to perform services on time (Ambe and Weiss 2011). In addition, issues left over from the nation's Apartheid past, particularly in the educational system, as well as post-Apartheid endeavours to right historical wrongs, according to Breier (2009), contribute to skills shortages. Additionally, "knowledge shipping," the need for skills in the global economy, contributes significantly to the loss of talents as skilled people leave the country in quest of more lucrative opportunities abroad.

Nengwekhulu (2009) argued that challenges or deficiencies in service delivery are brought on by a lack of management skills training among managers and supervisors in local government. Although some courses are available in this area, they have not been successful in producing the kind of public servant envisioned by the Batho Pele White Paper. Additionally, Koelble and Lipuma (2010) link the South African service delivery crisis to a lack of technical skills among local government officials in crucial fields like electrification, water and sanitation, and waste management. These skills shortages range from customer service and relations to financial management. The issue of non-delivery is further complicated by the lack of state capacity and the failure of the federal and provincial governments to impose laws on their agents in local government.

Sebola (2015) asserts that the perception among civil servants that local government is less significant since it is at a lower level hinders the provision of services by local governments. On the basis that their abilities are underutilized in local government, most local politicians and public officials with exceptional leadership and management capabilities are recruited into either interim or national politics and administration (Twenty Year Review, 2014). Local government should be the most significant sector given that it is responsible for local political, social, and economic issues and is at the center of service delivery, but it is also the one that lacks the greatest inventiveness and advanced abilities (Powell, 2009). Therefore, it is evident that local government, represented by municipalities, is severely impacted by skills shortages, and continues to face the direct consequences of such shortages due to its proximity to local populace. As a result, it is in urgent need of personnel who are appropriately qualified.

3.5.2.3 Cadre Deployment

The recruitment tactics of local governments continue to draw criticism, and they are routinely held accountable for subpar service delivery, ineffective policy implementation, and citizen demonstrations inside towns (Tshiyoyo and Koma 2011). According to Reddy (2016), political factors determined by the

current political philosophy of the ruling political party heavily impact appointments, dismissals, and the provision of services in the municipal sector. For instance, cadre deployment is the practice of appointing devoted supporters of the ruling party to positions in the government in various regions in South Africa (Shava and Chamisa, 2018). In other words, appointments are mostly dependent on public employees' loyalty to the ruling party since political party organizations use cadre deployment to impose administrative judgments on administrators (Mafunisa, 2003). Additionally, the ANC employs a tactical idea known as cadre deployment to appoint party members to crucial government positions to carry out the goals of the government's policies and programs (Tshishonga, 2014). Cadre deployment aims to ensure that government efforts successfully convert government policies and election platforms (Twala, 2014).

The practice has recently been connected to subpar local government service delivery. According to Kanyane (2014), cadre deployment hinders the delivery of municipal services when political party loyalty takes precedence over merit and qualification, which leads to the placement of unqualified and incompetent people with political connections in key positions. According to Shava (2018), cadre deployment has a negative effect on the delivery of government services because it can result in the failure of service training initiatives when political agents who are responsible for making appointments or who are deployed do not recognize the value of training and skills development interventions to enhance public sector performance and service delivery. Furthermore, selecting employees solely based on their political allegiance and partiality rather than their qualifications, objectivity, and impartiality would result in many qualified individuals being prevented from serving the state, further lowering the quality of government (du Toit and de Jager, 2014). Cadre deployment is a global occurrence that takes place in all democracies. Sithole and Mathonsi (2015) contend that while it is permissible to appoint government supporters, problems arise when these comrades are unqualified for their positions, as is all too frequently the case in local government.

Ncapayi and Ntsebeze (2019) point out that due to political uncertainty, corruption, and unaccountability, the cadre deployment program in local government has not always produced tangible results. Senior government officials have since acknowledged the policy's flaws; however, it seems to be failing in local government due to a lack of sufficient structures to ensure that cadres deployed in local municipalities fulfil at least the minimal requirements of the role they were about to occupy (Pearson and Ndlovu, 2018).

In contrast, the South African public system, according to Franks (2014), is a dynamic environment that is overrun by politics because of the widespread use of cadre deployment, which takes advantage of a gap in how elected officials interpret policy considering their ideologies or personal interests as well as those of their allies. According to Tshishonga (2014), the deployment of cadres also raises some issues with accountability because, in some situations, cadres feel that the alliance committee that assigned them to their role is responsible for them rather than their employers or the public (Twala, 2014). Most the government's cadre deployment committees, which function at the national, provincial, and local levels, are influenced by the internal divisions or factionalism (Twala, 2014), which can lead to less qualified or capable members of a more dominant faction occupying key positions in the public service. As a result, the policy is vulnerable to internal disputes or groups within the ruling government. The effective application of frameworks like Batho Pele may also suffer from actions like cadre deployment. One could claim that efforts to increase transparency and effectiveness are struggling to change the political-administrative culture that is allegedly impeding effective government, notably in the municipal sector (Franks, 2014). In addition, given the current poor quality of basic services, as seen by community protests, ineffective leadership, appalling poverty, and rising unemployment.

The government must hire competent public servants who can effectively improve the lives of the underprivileged and provide quality services (Tshishonga, 2014). Additionally, the strategy has been ineffective in some towns because cadre deployment has made it easier for corruption to occur in

the hiring and appointment of public employees, encouraging nepotism, favouritism, subpar service, and strict gatekeeping against non-loyalists in government employment (Sebake and Sebola, 2014). Given the growing challenges in local government service delivery, the government may need to re-evaluate how the policy is currently implemented.

3.5.2.4 **Corruption**

It is widely acknowledged that one of the biggest obstacles to effective policy execution, the provision of public services, and socioeconomic growth is corruption (Sebake and Sebola, 2014). Corruption still prevents municipalities from carrying out their constitutional responsibilities and running efficiently within the framework of South African local government.

Every civilization has some level of corruption, but the severity varies from one nation to the next. Researchers also offer several definitions of corruption, although most of these definitions center on the idea of using a public or private position for one's own gain (Skenjana et al., 2009). According to Sebake and Sebola (2014), corruption is an illegal act done against the interests of the public to benefit a minority group. Additionally, when the majority is excluded due to unlawful arrangements, corruption may take place. Ruhiiga (2009) defined corruption as the practice of using one's position in the civil service to obtain benefits that are not legally permitted through intermediaries and social ties. To put it another way, public officials who try to benefit themselves at the expense of society's interests to meet their personal needs are considered corrupt in the public sector.

Tooley and Mahoi (2007) highlighted Peter Langseth's (2000) viewpoint on defining characteristics, signs, and forms of corruption that are pertinent in the public sector .

3.5.2.4.1 *Different Forms of Corruption*

There are various forms of corruption in the public sector. According to Graycar (2015), corruption can take many different forms, such as bribery and

extortion. Bribery, which comprises making promises, giving, or delivering a reward in exchange for illegally influencing a public servant's actions or decisions, is also the most common form of corruption. This advantage may be received by the public servant, another person, or a third party. Bribery also includes using illegal means of payment to win official favors and financial support (Morris, 2011).

Mashele (2009) offers the bribery scenario, when a government employee is paid to perform a task for which they are not accountable. Using the example of embezzlement, Kennedy (2018) explains that it involves the misuse of resources by those who are given the authority to administer and regulate them.

Contrarily, fraud can be defined as the acts or behaviours of a public employee, another person, or an organization that induces others to grant the employee, another person, or organization undue benefits (Sheehan, 1994). Extortion also includes requiring someone or something to provide a benefit to a public employee, someone else, or both (Wu, 2005). The root of corruption is the abuse of power by those tasked with carrying it out. According to Vyas-Doorgapersad (2007), misuse of power permits and fosters corruption in the public sector. This statement serves as an example of the concept of abuse of power.

Extending abuse of power can result in widespread corruption and conflicts of interest, especially in the contracting process (Mantzaris, 2014). The distribution of goods or resources based on personal connections is known as nepotism in the public sector. Nepotism falls into this category too because it's a form of bias. Nyukorong (2014) uses the example of a manager selecting a cousin over a more qualified applicant to illustrate nepotism.

3.5.2.4.2 The Effect of Corruption in Local Government

The constitution is directly violated by corruption, which alters how the government should provide services to its inhabitants. Furthermore, there is no doubt that corruption directly affects the provision of services; in fact,

corruption is associated with subpar public service delivery. According to Mporu and Hlatshwayo (2015), one of the main barriers to the effective delivery of core services in local government is the poor performance and corruption of municipal workers. Municipalities frequently experience both large-scale and small-scale corruption; a conceptual core principle of both types of corruption is offered by (Prinsloo and Naudee, 2001). Petty corruption typically occurs at lower and medium administrative levels, especially when there is direct communication between officials, as opposed to grand corruption, which involves someone at the highest levels of the public service (Pillay, 2015).

Nevertheless, all forms and degrees of corruption have a detrimental effect on service delivery since they can cause the government to lose tax revenue, reduce investment in productive projects, and slow growth (Moyo, 2017). Additionally, corruption frequently causes resources to be diverted from their intended use, impeding the effective implementation of public policy and service delivery, and causing the public to lose faith in public institutions (Tooley and Mahoi, 2007).

To show how much corruption has an impact on how public services are delivered. Although it should be emphasized that perhaps the legacy and history of corruption was shaped by a very corrupt apartheid system that practiced grand corruption at all levels of government (van Vuren, 2017). Furthermore, because it ensures that public funds are not diverted to improve the lives of citizens and companies but rather to benefit a select few, endangering their social well-being, corruption completely sabotages the development of public services (Sebuke and Sebola, 2014). Despite the circumstances in which local government finds itself, corruption persists in all areas of government, mainly because those who engage in such procedures are almost always either members of the political elite or are somehow linked to them, making it difficult for law enforcement to punish them.

3.5.2.5 Poor Governance

Municipal service delivery issues are made worse by several governance, structural, and budgetary deficiencies. Several issues with municipal governments' governance have been brought up. In addition to corruption and favouritism, these include an absence of democratic will and leadership, responsibility, and government interference (Twenty Year Review, 2014).

Poor governance is linked to corruption, lack of responsibility, political infighting, and political meddling. According to Reddy (2016), political rivalries and associated conflicts between the political and administrative management systems inside municipalities are having a negative impact on municipal service delivery. Political intervention can take many different forms, just like internal conflict can hinder the delivery of services. The most frequent occurrence is when a political figure instructs the accounting officer to make judgments about the provision of services or the use of public resources that are against the law (Nengwekhulu 2009). Another instance of political intervention is when a political office holder transforms the council of ministers' support office into a parallel administration that competes with the main department administration. This undermines the capacity to provide services because staff members may be given incorrect instructions, leading to inefficiency (Mantzaris and Pillay, 2017).

According to Mofolo (2012), municipalities in South Africa struggle to operate effectively and efficiently, which results in a lack of internal controls and governance principles as well as mismanagement. The Local Government Turnaround Strategy (LGTAS) identified systemic problems, policy and law, political issues, and deficiencies in intergovernmental aid and supervision as the primary causes of substantial failures inside municipalities (LGTAS, 2009).

Mphehle (2012) cites several factors that contribute to a lack of service delivery in local government, including political infighting, corruption, inadequate financial and record-keeping abilities, and a lack of community involvement in decision-making processes. On the other hand, according to Nene (2016), the

current local government structure, in which local municipalities and districts carry out the same duties and are in the same region, continues to produce a great deal of uncertainty regarding the provision of services and functional responsibilities. Additionally, other than for jurisdiction, the responsibilities of local and district municipalities are the same. Numerous jurisdictional, functional, and authority difficulties have resulted from the district and local governments' substantial overlap in duties and authority. As a result, there can be some confusion about roles and responsibilities, as well as disputes over available funds and power (Nene, 2016).

3.5.2.6 Lack of Accountability

Accountability problems in local government include, but are not limited to, poor connection with local populations, role ambiguity, a lack of transparency in mayoral committee work, and weak and ineffective ward committees (Napier, 2007). In the Auditor General's 2018-2019 report, it is stated that local government accountability remains a concern (Auditor General, 2019). The Auditor-General (AG) has repeatedly emphasized the importance of accountability in municipal administration, starting with planning intended to meet citizens' needs and developing sufficient internal control and monitoring procedures to ensure correct financial and performance adequacy. The constitution and institutions like the Auditor General's office, which were created to increase financial responsibility in the public sector, are the sources of financial accountability in the government sector (Van der Nest, Thornhill, and de Jager, 2008). As a result, most municipalities have not put the regulatory measures into effect. The AG also noted the following instances of local government accountability violations for the fiscal year 2016–17:

- Over the course of the audit, the AG discovered that just 33 municipalities (13 percent) were able to generate excellent financial statements and performance reports while also complying with all applicable laws.

- Poor financial statement and performance report quality: According to the AG, just 22% of municipalities presented financial statements that were free of serious misstatements.
- Noncompliance with key governance rules is at an all-time high, according to the AG, with 86 percent of municipalities failing to comply with essential regulations, the highest rate since 2012-13.
- Irregular municipal spending surged by 75%, from R16.21 billion in 2015/16 to R28.376 billion in 2016/17, according to AG.

The AG claims that a lack of accountability has a detrimental influence on people's lives since municipalities are unable to meet their goals (Auditor-General Media Release, 2018). Three significant areas of effect were identified by AG's audits:

- Municipal financial health: Most municipalities are now unable to recover debt from municipal customers, and they are also struggling to pay creditors, as evidenced by huge sums due to ESKOM for energy and to water boards for water delivery, respectively.
- In 2016/17, R1.5 billion was spent on ineffective and inefficient spending.
- Municipalities' infrastructure development and maintenance deficiencies.

Lack of forthrightness by the municipal leadership has resulted in inadequate performance standards and procedures, which have decreased responsibility. Major contributors to the lack of accountability have been identified as municipalities' inability to adhere to significant legislation as well as the failure of the federal and provincial governments to provide necessary assistance to municipalities. According to Madonsela (2018), bad leadership and a lack of accountability have resulted in inadequate governance, which has impacted service delivery.

Several significant challenges to adequate public service delivery have been noted above, all of which naturally impede the efficient implementation of the waste management concept in local government. For the tourism business to fully thrive in the city that is engulfed by these circumstances whilst maintaining

a good positioning seems almost impossible, because of negative destination attractiveness.

3.6 Transforming Our World: The 2030 Agenda for Sustainable Development

Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable.

Goal 11 of the 17 Sustainable Development Goals of the United Nations addresses the problem in this study, where it is denounced that by 2030 there should have been a reduction in environmental effect generated per capita in cities, inclusive of air quality, municipal and waste management. Goal 11 speaks to the study because tourism is in decline stage in the city of Pietermaritzburg, where environmental impact and social norms have led to this dire stage, together with mismanagement of public resources. The tourism business is highly dependent on public government for service delivery to keep a positive destination image. With solid waste accumulating in public areas without proper collection or sweeping, it causes an unfavourable image for visitors or tourists. Goal 11 further emphasizes the need to strengthen the support for national and regional planning for sustainable economic, social, and environmental development (UN,2015). This goal is inextricably linked to the objectives of this study, where the issues of policies and guidelines for implementation are critical for sustainable tourism development and viable service delivery to the people, where economies are expected to peak. This goal reflects the Butler's model where development and frameworks cannot be excluded for provision of a desirable destination. The United Nations denotes that waste management affects all industries especially the one in question 'Tourism' which can never be developed as a lone industry.

3.7 Obtaining Global Frameworks Regulating Waste Management

This section outlines the regulatory frameworks that are now in place, as well as expert insights and global legal framework that have been passed to address waste management.

3.7.1 United Nations Environment Programme

The leading environmental authority in the UN system is the United Nations Environment Programme (UNEP). In addition to supporting in the implementation of environmental commitments at the national, regional, and international levels, UNEP uses its knowledge to advance environmental standards and practices. The goal of UNEP is to provide leadership and promote collaboration in environmental protection to inspire, educate, and empower nations and individuals to improve quality of life without endangering that of future generations. UNEP (2016) drafted Guidelines for Framework Legislation for Integrated Waste Management, for countries to benchmark different countries' legislations and frameworks for sustainable waste management practice, where Part 1 and Part 2 illustrated some examples for integrated waste management and guidelines. Countries are however urged to follow these guidelines as a learning journey instead of copying and inserting them on their legislation. UNEP denotes that these guidelines can be used at any stage of the country's legislative development and/or legislative review.

3.7.2 International Conventions, Agreements, Treaties and Protocols Regulating Pollution and Waste Management

The Republic of South African (RSA) White Paper on Integrated Pollution and Waste Management makes note of 28 conventions and treaties that RSA is part of, with others relevant to specific industries and this study denotes only those relevant to Municipal Solid Waste Management (MSWM). However, benchmarking some treaties for good waste management practise. This allows for the obligation of best waste management practices on land and at sea, with all parties involved for the same goal of waste minimization. In all these conventions and treaties, some have no domestic legislation which has been promulgated in RSA.

3.7.2.1 *Convention on The Prevention of Marine Pollution By Dumping Wastes*

Recognizing that the maritime environment and the living organisms it supports are critical to humanity's survival, and that everyone has a stake in ensuring that its quality and resources are preserved. recognizing that, in accordance with the UN Charter and international agreements, nations have the constitutional right to replenish their own resources in accordance with their own environmental policies and the duty to make sure that activities carried out within their borders do not harm the environment of other countries or regions (White Paper, 1996). The dumping of matter scheduled in the Convention at sea is governed by this Convention. It lists forbidden and permit-required chemicals and establishes criteria in this regard (White Paper, 1996). The Dumping at Sea Control Act has been integrated into South African law (73 of 1980).

3.7.2.2 *Convention on Wetlands of International Importance Especially as Waterfowl Habitat*

This Convention and its Protocol, which focuses on protecting wetlands, have South Africa as a signatory. Because there is a need for the preservation and protection of wetlands, this Convention indirectly relates to integrated pollution and waste management. There have been about a dozen wetlands identified in South Africa, notably the region around St. Lucia Lake. The Conservation of Agricultural Resources Act, 43 of 1983, the corresponding Nature Conservation Ordinances of the several provinces, and other pertinent domestic legislation (White Paper, 1996).

3.7.2.3 *Vienna Convention for The Protection of The Ozone Layer*

This Convention's and its Protocol's main objective is to safeguard both people and the environment from the harmful consequences of ozone layer-depleting activities. According to their resources, the parties are required to work together on research and legislative initiatives as well as to create protocols

and annexes that contain agreed-upon standards, methods, and measures (White Paper, 1996).

The 1987 Montreal Protocol sets a deadline for getting rid of substances under control that damage the ozone layer. Based on the potential of each chemical to deplete the ozone layer, it provides a formula for estimating calculated amounts of production and use of illegal substances. Despite the Convention's implementation, no domestic policy or legislation has been adopted (White Paper, 1996).

3.7.2.4 *Fourth African, Caribbean and Pacific-European Economic Community Convention*

This Treaty, which South Africa has joined but not ratified, is a cooperative agreement between the African, Caribbean, and Pacific countries and the European Community and its member states. Its goal is to enhance and diversify links among African, Caribbean, and Pacific nations to foster solidarity and mutual gain. It also aims to assist and expedite the economic, cultural, and social growth of these nations. Title 1 focuses on the environment (articles 33 to 39). Article 39 deals with regulating the transnational movement of hazardous and radioactive waste.

The provision clearly forbids the importation of such waste into African, Caribbean, and Pacific states as well as the direct and indirect transfer of such waste from the European Community to these regions. South Africa has not yet passed domestic legislation or guidelines in this area, but once the convention is ratified, it will be compelled to do so. South Africa is also thinking about a bilateral deal with the European Community (White Paper, 1996).

3.7.2.5 *Protocol on Environmental Protection to The Antarctic Treaty*

Pressure to investigate Antarctica's mineral possibilities led to the negotiation of this Protocol. It imposes duties for environmental protection, such as integrated waste management. The Antarctic Treaty Act is the relevant domestic statute (60 of 1996). (60 of 1996). According to the agreement, Antarctica is classified as a "natural reserve devoted to peace and science"

(Art. 2). While Article 7 of the Environment Protocol bans any operations exploiting Antarctic mineral resources, except for scientific study, Article 3 of the Protocol lays out the essential principles that apply to human activity there. The Protocol may only be amended until 2048 with the consent of all Antarctic Treaty Consultative Parties. In addition, the ban on mining activities in Antarctica will continue until a binding legislative framework is in place (White Paper, 1996).

3.7.2.6 Convention on Biological Diversity

A legally binding agreement on a global scale, the Convention on Biological Diversity (CoBD) is devoted to "the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources." It has been ratified by 196 countries. Its fundamental objective is to persuade people to take behaviours that will result in a future that is more sustainable. As a signatory to this Convention, South Africa is tasked with preserving biodiversity and, as a result, indirectly promoting techniques of environmentally sound integrated pollution and waste management. The Department of Environmental Affairs and Tourism released a green paper in October 1996 titled "Conservation and Use of South Africa's Biological Diversity." Although no law has been passed to give effect to the Convention, various legislative enactments, such as the Nature Conservation Ordinances (NCO), are indirectly applicable (White Paper, 1996).

3.7.2.7 Convention on The Prohibition of the Development, Production and Stockpiling of Chemical Weapons

This Convention is important because chemical weapons can cause pollution if they are not properly disposed of, which is relevant to South Africa's Draft White Paper on Integrated Pollution and Waste Management. Therefore, it is crucial to keep them under control, especially through their eradication in line with the "Cradle to Grave" ideology. South Africa ratified the Convention in

September 1995 and incorporated it into national law (Government Gazette, No. 17967 dated 2 May 1997).

3.8 Understanding South African Legislative Framework in Support of Waste Management in Dealing with Solid Waste Accumulation

This section looks at the South African legal framework that governs municipal solid waste management, starting with the Constitution, which is the highest legislation in the land, and moving on to derived policies.

3.8.1 *South African Constitution (Act 108 of 1996)*

The Bill of Rights, which is found in Chapter 2 of the Constitution of the Republic of South Africa, is a human rights charter that requires the government to preserve the civil, political, and socioeconomic rights of all South Africans as well as the environment. Section 24 (a)(b) which speaks to the Environment where everyone has a right to; “(a) an environment that is not harmful to their health and wellbeing; (b) have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: (i) *prevent pollution and ecological degradation.* (ii) *promote conservation;* and (iii) *secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.*”

This is of particular significance in this study because it echoes the emphasis of waste management in the environment for future use and sustainable development for socio-economic benefits such as tourism. The environment should be conducive for humans and must not affect their health, tourists are amongst the humans affected by poor solid waste management, which result to not only land pollution, but air and water contamination which eventually affects human health. Visible implementation of waste management policies in areas of concern should be prioritized as it is the constitutional right to do so. Section 36 of the constitution imposes limitations on the same constitutional rights. Section 36 of the RSA Constitution contains such provisions to assist the government in drawing boundaries while exercising constitutional rights.

The following limits are established in Sections 33 (1) and (2) of the Constitution: lawfulness, rationality, procedural fairness, and accountability.

3.8.2 *The National Environmental Management Act 107 of 1998*

The National Environmental Management Act (NEMA) with amendments, establishes principles for environmental decision-making, organizations that will encourage cooperative governance, and processes for coordinating environmental functions performed by state agencies. Chapter 1, principles 3 and 4 highlight the importance of sustainable development for social, environmental, and economical sustainability. It further emphasizes the acknowledgement of responsibility of environmental sustainability throughout its life cycle by policy, products, service, programmes, and projects, where all stakeholders involved must have the right to make decisions. It serves as the cornerstone for all Waste Management Departments in the country/ municipalities, with acknowledgement of several amendments since 1998. The objectives of all municipal waste management departments are drawn from this constitutional ACT. further encapsulate what the Integrated Environmental Plan should consist off, and how appointments should be carried out in the municipalities. This is particularly relevant to this study because the Waste Management department in Msunduzi has had vacant posts both in managerial and non-managerial positions. With some of the malfunctions of the department blamed on that people appointed do not possess relevant qualifications and expertise, which causes a shortfall in implementation of plans by the department (Msunduzi Integrated Waste Management Plan,2014).

3.8.3 National Environmental Management; Waste Act, No 59 of 2008

The National Environmental Management and Waste Act (NEMWA) was created to update the law regulating waste management to protect environment and public health by implementation of quality measures for prevention of pollution and ecological degradation, as well as for ensuring ecologically sustainable development. It also establishes institutional

arrangements and planning issues, as well as national norms and standards for regulating waste management by all sectors of society. Chapter 2 of NEMWA provides waste management strategy for provincial and local municipalities, with the expectation that all municipalities adhere to the national norms and standards for waste management. Subsection 8 of Chapter 2 further highlights the waste management methods such as waste collection, removal, and disposal, that should be used in cognisance of subsection 7 of the Act. The NEMWA also highlights the waste management hierarchy that is utilised for waste management, with a strong emphasis on identification of waste generation sources, types of waste generated and sorting, and waste disposal areas such as landfills. There is one landfill (New England Road Landfill Site) in Pietermaritzburg that has burnt over 3 times in the previous year alone, scavengers were particularly blamed for these fires (see The Witness, 17 August 2020).

3.8.4 Public Finance Management Act, No. 1 of 1999

The South African government pronounced the 'Summary of the Public Finance Management Act of 1999 (With Amendments)'. Provisions encapsulated in the PFMA has set the conditions used to regulate and manage finances in National and Provincial government institutions, which the regulatory of municipal waste management forms part of these core functions. Meanwhile, there are arguable cases on fraud and corruption which the media keeps reporting when the CBD waste management matters are discussed (see The Witness, 19 February 2020). Alleged incidents of fraud and maladministration conflict with the set-out procedure contained in the PFMA, which alludes to the effective and efficient management of revenue, expenditure assets and liabilities. Terms of the section furnished the guidelines which inform the practices of mandated officials from the municipality who pocket funds dedicated for service delivery, and where 121 ghost employees were paid by the public funds (see ENCA, 02 March 2021). The PFMA further outlines the duties and responsibilities of government officials who act as custodians of government funds. Another critical role envisaged in the PFMA

is the way all government social institutions should adopt strategies to combat fraud and maladministration. It was critical to refer to the PFMA as it dealt with public finances being utilized by public institutions.

3.8.5 The White Paper on the Transformation of Service Delivery, 1997

The White Paper on the Transformation of Service Delivery of 1997 invoked more than nine 'Batho Pele' principles (inclusive of the recent amendments). In translations, Batho Pele means 'putting people first'. In the context of service delivery, the first people these principles refer to are the recipients of public services- which in this study are represented by the tourists, and whom government officials must consider diligently. Amongst these principles, there is accountability and value for money. Both these principles were crucial in the study because they require officials to account publicly and to refrain from wasting and misappropriating public funds. This White Paper further denotes the importance of service excellence to both internal and external customers. The tourism industry is a services industry, where customer satisfaction is made from the overall experience and the ambience of the destination. For its optimal performance, it is reliant of government to deliver public service.

3.9 Charters, Treaties and Other Plans Of Action To Tackle Waste Management

This section presents charters, treaties and different plans of action that have been adopted by government to tackle issues of waste management in South Africa.

3.9.1 *Back to Basics Approach*

The Back-to-Basics plan aims to pull all municipalities out of a dysfunctional state and assist and incentivize them to stay effective by addressing corruption and fraud in a systematic and timely manner. Back to basics strategy provides essential services at the municipal level. Therefore, the strategy is used as a mechanism by the South African government to promote a high degree of efficiency around any public service delivery. Refuse and waste removal form part of the basic services promoted by this strategy. To promote good

supremacy, this strategy requires transparency, community engagement, and responsibility. It further stipulates that there should be no supervision intervention, as well as delegation of proper system advocates to ensure a functioning administration, a clear separation of roles and responsibilities, serious corruption repercussions, fraud, and maladministration by pressing for lifestyle audits (CoGTA 2009).

3.9.2 *Summary of the National Waste Management Strategy 2020*

The NWMS provides a cogent framework and strategy for the implementation of the Waste Act 59 of 2008 and outlines the government's policy and strategic approach to waste management within the framework of the South African government's socioeconomic development agenda, which is "equitable, inclusive, sustainable, and environmentally sound." Additionally, it supports Developmental Goal 12 of the 17 UN Developmental Goals. The NWMS roadmap lists challenges that separation at source must overcome, such as the fact that policy, legislation, and regulation are either rigid, not applied correctly, or include loopholes that have unexpected implications. Lack of industrial and local government adoption, monitoring, and reporting of waste management plans, which is associated with unreliable information on the types and quantities of waste streams (NWMS,2020). These challenges draw attention to the problem of addressed by this study.

3.10 Conclusion

This section of the study reviewed the existing literature on issues of MSW within a general perspective, which were drawn from different sources. The chapter started by defining the concept of waste, Municipal Solid Waste (MSW) management including its processes as well as waste generation and composition. Thirdly the chapter redressed the Msunduzi Municipality's Integrated Waste Management Plan which argues that the status of waste management in Africa is deplorable, and the waste hierarchy was not well pushed at the outset. However, the continent's expected growth in waste creation and the number of people living in poverty necessitates efforts to

improve waste management. Wasted possibilities must be viewed as a valuable resource for Africa and its people (Oelofse and Nahman, 2018). This chapter explored the legal frameworks that govern waste management in South Africa. These agendas give legislative prescripts that enable various governments to properly regulate waste management while remaining within the constraints of the various states' constitutions. The 2030 Agenda for Sustainable Development's Goal 11 was also mentioned because it addresses the same problem as this study. The chapter then turned to the international institutions and treaties that govern waste management. There were also charters, treaties, and other plans of action submitted to address waste management challenges. The Back-to-Basics municipal strategy and a description of the National Waste Management Strategy were also discussed in this chapter. In addition, as the case study area, the chapter looked at the Msunduzi Municipal Integrated Waste Management Strategy. Finally, the chapter examined the issues of MSW and service delivery concerns with respect to South African municipalities and then a conclusion ends this chapter

CHAPTER FOUR

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

Chapter four provides a thorough discussion of the research method, designs, approach data collection instrument, and procedure, as well as rationale for the researcher's methodological choices to meet the study objectives and attempt to solve the research problem. This study used a qualitative approach. The research instrument, method and design were adopted because they were suitable in addressing the study questions as indicated in Chapter 1 of this study. The questions were as follows:

- What effect does solid waste accumulation have on tourism businesses of the Pietermaritzburg Central Business District (CBD)?
- What is the waste management process in the tourism business in Pietermaritzburg CBD?
- How does the destination's negative image of Pietermaritzburg CBD adversely affect the tourism business?

4.2 Research Paradigm, Method, and Design

According to Samuel (2017), a research paradigm is the holistic method that determines the rest. Chilisa and Kawulich (2016) believe that a paradigm is an individual's perception of the world shaped by philosophical assumptions about the nature of reality. As a result, reality may differ from person to person (Aliyu, Bello, Kasim and Martin, 2014). The constructivist epistemological approach was adopted in this study as the research paradigm since it would be more suited to meet the study objectives. Gerstenmaier and Mandl (2001) argue that a constructivist approach is a position in which knowledge is regarded as constructed, based on the assumption that what one dim as knowledge is the consequence of constructed processes, with different

personal experiences where a similar situation is interpreted or analysed differently by each person.

Table 4.1 Summary of research method, design, and tools

Research paradigm	Constructivist
Nature of knowledge and reality	Subjective
Research approach	Qualitative
Research Design	Case Design
Data collection tools	Thematic, descriptive codes and actual responses

Table 4.1 provides a summary of the research paradigm, nature of knowledge, method design tools and the approach to data analysis.

4.2.1 **Research Method**

Pellissier (2007) defines qualitative research as an approach to research that involves verbal and visual descriptions, which is ideal for the type of questions this study was asking. Research questions were answered, and objectives were fulfilled using a qualitative approach. To gain a better understanding of the topic under study, a subjective humanistic and interpretive research paradigm was used, as well as interaction with persons who were directly experiencing the situation in this case being tourism business personnel.

4.2.2 **Research Design**

Research design, according to Kruger and Welman (2001), is the process utilized to answer the research questions. (Burn and Grove, 2003; Creswell and Plano, 2007) agree that a research design is a process utilized to carry out an investigation. Mouton (2009) argues that the research design's primary purpose is to ensure that the study's exploratory results are suitable. To ensure that the final consequences are reasonable, the research design step is taken. A descriptive case study design was used for this study as mentioned in 1.7.2. Managers and tour guides were interviewed. Creswell (1998) denotes that a case design is an in-depth or explorative analysis of a limited system. Case studies are thorough and intensive analysis of a particular case utilizing data

from multiple sources (Bryman, 2012). A descriptive approach for this case was used. Descriptive case studies may take on a literary format (Zainal, 2007), which resonated with this study.

4.3 Target Population and Sampling

According to Peterson and Merunka (2014) the study population refers to a collection of persons, groups, or organizations as well as human products and events that adhere to the research standards and requirements. Welman, Kruger and Mitchel (2005) go on to define the research entity as the population, which might include humans, groups of people or institutions, as well as anthropological products and activities or the circumstances in which they occur. A population is a subset of the inquiry's overall constituents, from which the researcher hopes to draw explicit conclusions. According to Bless, Higson-Smith, and Kagee (2006), a population is a group of complete conventional elements or persons on which the research is focused, and on which the researcher wishes to exert some influence over certain features. The study population was tourism businesses in Pietermaritzburg. The Tourism business comprises of different services: Transportation service; Travel agencies; Tour Operator; Destination Management Company; Accommodation; Guided tours and tourist guide; Hospitality (Tottler, 2019). The study population was selected based on these tourism business traits. The study population was 35 tourism businesses in PMB CBD from which the sample was drawn.

As part of inclusion and exclusion criteria, the participants were selected according to their roles and responsibilities in the job. A tour guide needed to have at least 3 years' experience working with the organization and the executive personnel must have been in a role that allows them to engage with tourists such as Public Relations and Marketing officer, Interpretation Officer, and Environmental Education. Ten participants were recruited via email asking them to participate in the study, where a letter of information and the study proposal was issued so they are aware of what the study was about and prepare for the interviews.

4.3.1 Sampling Method

As defined by Neuman (2006), sampling method is for selecting a sample from a target population to gather data on an observer-observable fact or event that characterizes a researcher's target population's characteristics. Participants become the aspects of the desired examination according to (Cloete,2007). These individuals were selected because they would be useful to the enquiry and were readily accessible to participate. To ensure that all relevant demographic components were included in the study, a purposeful sampling method was applied.

According to Bryman (2008), purposive sampling can be classified as a non-probability sampling which involves making judgments about human beings based on diverse criteria, such as expert knowledge of the enquiry topic, and/or the respondents' competence and willingness to participate in a specific examination. Purposive sampling was used for this study because of its cost-effectiveness, which allowed the researcher to include participants who would have been able to provide relevant data to meet the study's questions.

4.3.2 Sample Size

The size of the samples is 5 tourism businesses inclusive of landmarks that are under the administration of the Pietermaritzburg Tourism. This therefore means the 5 tourism attractions/establishments being uMsunduzi Museum, KwaZulu-Natal Museum, African Link Tours, Tatham Art Gallery, Project Gateway will each have their own separate gatekeepers' letters. From each establishment the researcher had purposively requested 2 participants who represent both managerial and non-managerial employees to participate in the sample because they have different interaction with tourists on their organization. In total 10 participants were interviewed for this study.

Table 4.2: Details of Participants

Date	Duration	Codes	Categories	Organization	Interviews
25/03/2022	56m	MLR	A	African Travel Link	1
25/03/2022	1h 40m	NMR	B	African Travel Link	1
20/03/2022	1h 28m	MLR	A	Msunduzi Museum	1
20/03/2022	1h 15m	NMR	B	Msunduzi Museum	1
22/03/2021	46m	MLR	A	Tatham Art Gallery	1
22/03/2022	55m	NMR	B	Tatham Art Gallery	1
24/03/2022	1h 28m	MLR	A	SANBI	1
24/03/202	30:00m	NMR	B	SANBI	1
24/03/2022	2h10m	MLR	A	KZN Museum	1
24/03/2022	40m	NMR	B	KZN Museum	1

Table 4.2 is a total breakdown of the 10 interviewed tourism organization's respondents, with 5 of them being Tourism experts and 5 contact staff who interact with guests. The facilitation of the interviews considered the strict Covid 19 protocols, abstaining from any physical contact with respondents.

Category A- Represents the 5 respondents who are tourism experts occupying executive or managerial positions (Managerial Level Respondents- MLR).

Category B- Represents the 5 respondents who are tour guides or any non-managerial employees who interact with guests daily in these tourism organizations (None-Managerial Respondents- NMR).

4.4 Data Collection Process

Data collection is still an important aspect of research. According to Polansky and Wallet (2011), a desired research method has the most effect since it can influence the various behaviours of the selected participants. For semi-structured interviews, the researcher employed open-ended questions. Data collection, according to Churchill and Lacobucci (2004), is an important procedure utilized to address research hurdles encountered by researchers as

their investigation progresses. The interviews included managerial personnel such as Public Relations and Marketing director, Chief Executive Officer, Education and Research director from these organizations, as well as non-managerial staff such as tour guides and interpretation officers, receptionist, and gallery maintenance personnel. The study objectives were used by the researcher to draw up the interview schedule, together with the study's specific questions for the investigation. The interviews were conducted during the day which during normal operating hours of tourism establishments, this was informed by access to the respondents who were only available during working hours for the interviews. The time was between 08:30 am to 16:00 pm.

Microsoft Teams and Zoom was used as an information gathering software, which helped the researcher to record and store accurate information, used Google Drive as a backup for ascribing of information, post research referrals, maximised concentration levels between her as an interviewer and the respondents as interviewees. The initial time allocated for all interviews was at-least 30 minutes depending on the state of respondents' health, state of emergence, but; however, some interviews took longer than expected because of the follow-up questions on certain responses. In terms of accommodating language barriers, the structure of interviews was strictly in English which is the medium of communication and instruction in all tourism establishments, with follow up questions or clarification of some aspects of questions by the researcher which helped the respondents to have clear understanding of what the asked questions was. There were no special needs respondents such as people living with blindness, deafness, physical impairments, or any other special needs a researcher would have taken into consideration during data collection.

4.4.1 *Data Collection Instrument*

The section on data collection instruments presents the different tools used by the researcher to unveil assembled data. These tools comprise of interview guide for individual respondents.

4.4.1.1 Interview Guide

According to Patton (2002), although interviews are (to a greater or lesser extent) focused on the researcher's demands for data, they still resemble regular talks. They also differ from casual conversation because they are conducted with the utmost care to guarantee validity and reliability. This study employed leading questions during semi-structured in-depth interviews with individuals. This form of interview is designed to delve into the respondent's personal perceptions and recollections in greater depth. This strategy is applied to issues about which little is known and where a thorough grasp is required (Patton, 2002). The approach allows the researcher to pose direct questions, and this technique is deemed the most operational way of collecting reliable data from selected respondents. Clough and Nutbrown (2007) refer to the interviews as 'controlled oral conversations. Likewise, interview's efficacy strongly rests on the communication abilities of the interviewer. Gomm (2004) adds that 'interviews take account of unambiguously well-thought-out questions, focused listening, intermission, digging further aptly, whilst urging the respondent to speak unreservedly, and notwithstanding making it easy for interviewees to respond'. The purpose of choosing this method was to allow the respondents to give detailed answers about the problem of waste accumulation and its effects on the tourism business. Interviews helped the researcher to receive the most accurate answers from respondents, which validates the need for this study. This study used the following tools: Microsoft Teams and an interview schedule.

4.4.1.1.1 Interview Schedule

An interview schedule is a plan for obtaining information that includes a series of questions and other prompts with the aim of learning information from respondents (Abawi, 2013). Through Microsoft Teams as a meeting and data recording platform, individual interviews were conducted, and a semi-structured interview schedule was employed as the data gathering instrument. To ask participants semi-structured questions during one-on-one interviews, the researcher consulted the interview schedule. The investigator was able to

consistently ask questions because of the interview schedule, which was chosen. To prevent misunderstanding and to assure complete clarification on all matters, research participants were directly interviewed. The interview schedule was distributed to all the selected respondents a weeks' prior the actual interview was conducted. The researcher used the e-mails distribution to transmit the interview schedule/s. The purpose was to allow the respondents to prepare their responses extensively and adequately.

4.4.1.2 *Respondents Profile*

Table 4.3 below offers the profile of 10 respondents who participated in the study. Tourism businesses rely on its personnel to offer the most suitable service and there are not better respondents than people who offer those services and experience to customers. The study respondents comprised of tourism business experts and contact staff offering tourism service experience.

Table 4.3: Breakdown of Respondents Details

Name of Organization	Interview Code	Total Number of Interviews
SANBI	SBK	02
Msunduzi Museum	MM	02
African Travel Link	ATL	02
Tatham Art Gallery	TAG	02
KZN Museum	KZNM	02
TOTAL		10

4.4.1.3 *Method for Enlistment of Respondents*

This study included the respondent enrolment process. E-mails were sent to all affected respondents as a medium of communication (see appendices). Communication sent to respondents included the final proposal of this study, which was approved by the review committee recommended by DUT. The breakdown of respondents (see table 4.3) was set out all organizations that agreed to participate in the inquiry. Request of permission to conduct the study was issued by the researcher to the Marketing Director at KZN Museum,

Communication Officer at Msunduzi Museum, Academic and Researcher at African Travel Link, Interpretation Officer at SANBI: KZN Botanical Gardens and Communications Director at Msunduzi Municipality for Tatham Art Gallery, which were all approved. The study procedure entailed the following:

- The researcher first interviewed the managerial level respondents from each organization and lastly the non-managerial level respondents. This was due to the work demands of the managerial level respondents, whose availability is scarce, therefore the need to be accommodated at their most convenient times. The researcher issued letters of consent to all the participants following the grant of permission he received to conduct and participate in this study. Consent letters detailed the inquiry purpose, type of the research, contact details and other essential information, which was organised to enhance the validity of research findings. All respondents were interviewed individually.

4.5 Data Analysis

Data Analysis is a process whereby data that has been collected is explained or interpreted to draw possible conclusions and open room for recommendations where needed (Sunday,n.d). This is a qualitative study and qualitative data collection methods such as interviews were used, qualitative data analysis methods are used to analyse data on the study topic. After the data gathering was completed, the data analysis procedure began. This study employed thematic analysis as a research instrument, which is a basic method for qualitative analysis that assisted the researcher in categorizing this study into various themes as stated by (Holloway and Todres, 2003)Thematic data analysis may include familiarizing yourself with the data through reviewing, studying, and listening, transcribing taped material, organizing and indexing the data for efficient access and recognition, and anonymizing confidential material, to name a few of its components (Lacey&Luff, 2001). Systematizing data into categories based on subjects, perceptions, or equivalent descriptors should be used for exploratory data interpretation.

The researcher used windows, excel, and manual to analyse and interpret empirical data to improve the quality of the research findings and presentation. 'Qualitative investigators generally evaluate data by developing new perceptions, constructing theoretical explanations, and testing the relationships between viewpoints,' according to Nueman (2006). According to Lancaster (2017), data analysis can be thought of as a technique for converting data into information. It's very important to emphasize that information refers to organized facts that may be used to raise awareness and make well-informed judgments.

In other words, the analysis' final goal is to sift large amounts of data into procedures that can be easily managed and engaged, as well as to discard data that isn't relevant to the exploration design's programming. Another important goal of data analysis is that the information acquired can be easily clarified. The classification of respondents was based on findings from non-directive interviews which were based on the philosophy and evidence presented in Chapter 3 of this study.

According to Creswell (2009:51), data analysis encompasses several stages, including:

- *Systematizing and organizing data for examination.*
- *Acquiring a broad logic of information*
- *Coding and classifying the most important subjects.*
- *Demonstrating the key topics in an exploratory sequence of events*
- *Understanding information in accordance with its literacies*

The researcher transcribed all the data collected during the interviews. It's important to note that the study findings led the process of transcribing the data into distinct themes. Welman, Kruger, and Mitchell (2005) advocate that during exploratory investigations, researchers employ interpretations compiled from tape recorders and examinations. The researcher gathered and theme analysed data, organized it, and divided it into appropriate subjects for classification and investigation.

Controlling data, coding, and summing up data are all part of the data procedures in explorative research (McDaniel and Gates, 2010). The researcher transcribed material from video recordings, rearranged it, where the evidence was previously tagged according to the study objectives. The benefit of data analysis is that it enables for the discovery of unplanned relationships in exploratory research.

4.6 Delimitations to The Study

Simon (2011) defined delimitations as characteristics that restrict the scope and boundaries of your investigation. The researcher has control over the boundaries. Delimiting variables may include the researcher's selection of objectives, the research questions, and variables of interest such the population that the researcher has chosen to study and the theoretical viewpoints that the researcher has taken as opposed to what may have been embraced. Making restrictions on the sample size, the scope of the geographic area from which data is collected, the types of responses allowed by data collection tools, or the time frames for the study allows the researcher to carry out the study. These restrictions can be mentioned (Baron, 2012).

The delimitations for this study were the sample size where a limited number of the initially proposed sample inclusive of establishments that represent the accommodation and transport sector of the tourism business were not willing to participate on the study. A governmental organization, Tourism PMB, which manages most of the tourism attractions within the CBD namely, Ghandi Statue, Pietermaritzburg Railway station, Old Colonial Building, One O'clock Gun, and City Hall was not willing to participate in the study. Imperial Hotel was a proposed accommodation service business where a gatekeeper's letter was not acquired and was shut down in 2021. A similar situation occurred with Avis Car Rental where they were not able to render a gatekeeper's letter ensuring that they were willing to participate on the study. For this reason, they were excluded from the sample and study.

4.7 Ethical Considerations

'Inquiries that tap into personal lives, and more importantly, the dignity of individuals, require to be considered as a vital subject because it touches on the culture of concerned responders,' says Nchabeleng (2015). Brook and Oliver (2003) backed this up by saying, "More than anything, the consideration goes beyond the mere subject being treated with essentiality," and that the researcher must also treat respondents with respect, care, and sympathy. It is worth noting that the researcher got authorization from the Durban University of Technology's Faculty of Management Sciences to conduct this research. This is the result of an important and thorough process facilitated by the Faculty Research Committee [FRC] and the Institutional Research Ethics Committee [IREC], both of which came out strongly on the ethical issues and considerations that the researcher should always keep in mind when conducting research. The goal of this method was to ensure that this study met all the relevant research ethical requirements without fail.

4.7.1 *Permissions Needed*

According to Creswell et al. (2007), before the researcher may proceed with his study, he needs permission from the parties concerned, be it the site management, individuals/people concerned (parental consent when its children who are below the legal age), and the campus based institutional review board. They also denote that it does not matter whether it is a public site, permission to conduct should be obtained even from the gatekeeper of a Non-Governmental Organization (NGO) because it is ethical practise and reduce conflict of interest for the population needed to conduct the study.

Employees were given digital copies of the research proposal so that they could give their approval for the study to take place. As a result, this inquiry placed a stronger emphasis on the significance of carefully examining the confidentiality of all respondents' information, as this was another of the key research ethics that led to this inquiry. The researcher did an excellent job of describing the necessity for and goals of the study to the respondents, as well as answering all their questions. When it came to committing to participate,

informed consent required all responders to consent in writing and verbally. On the informed consent forms, there is a section requesting for permission to use video recording as part of this investigation. The researcher avoided providing any geographical cues, names, or other identifying information that would jeopardize the anonymity of all respondents. Furthermore, respondents were assured that all information provided would be used solely for the purpose of this investigation—hence the secrecy clause's retention. All respondents were notified that people who may be interested in the final dissertation of this study are more than welcome to request a copy. The researcher also informed all respondents that they might withdraw from the study at any time without having to offer any reason to the researcher or any other affected party. The Gatekeeper's letters were obtained from all establishments that formed part of the study sample.

4.7.2 Confidentiality and Anonymity

According to Grinyer (2002), despite the highlighted importance of maintaining confidentiality when doing research, there is a very limited supply of literature relative to how crucial it is for researchers to disguise their respondents in qualitative investigations. The existing literature on study design and ethical norms, according to Giordano, O'Reilly, Taylor, and Dogra (2007), rarely has the accurate and applicable methods of control on professional conducts that researchers should use to hide their fellow respondents in exploratory investigations.

This study, on the other hand, proved confidentiality and anonymity by requiring respondents to sign consent letters before the beginning of the interviews, and by which the respondents had a legal right to participate in and/or withdraw from the investigation. Throughout the interviews, the researcher received an informed written permission letter from interested respondents. As a result, all responders to this investigation were kept anonymous. The researcher assured respondents that the information shared would be kept private between the study supervisor and the researcher prior to, during, and after the investigation. To maintain confidentiality, the

researcher chose to describe respondents using specific codes rather than names or other identifiers. Finally, the respondents were advised that all the information they provided would be kept for five years before being discarded.

4.7.3 *Data storage and disposal*

Interview recordings and consent forms were downloaded and stored on Google Drive, which only the researcher has access to with her credentials (Password protected). The data is stored on Google Drive for 5 years as per the institutional rules and will be discarded after. It will be discarded by deleting all recordings and files on the drive and permanently deleted from the deleted items so that it cannot be recycled. Hardcopies will be stored on the DUT storage and shredded thereafter. During Data Analysis, the researcher will do her own data analysis, which ensures data confidentiality. Data sharing will be kept as per the institutional policy where only the researcher and the supervisor have a password access to data. That is the only way data sharing is maintained with the supervisor.

4.7.4 *Beneficence, non-maleficence, and justice*

Informed decisions are rational decisions: the evaluation and acceptance of the reasons for acting, assuming the possession of all pertinent data. As a result, 'being informed' is the basic principle of independent decision making; this posits the official declaration between the participant and researcher as contractual (De Roubaix, 2011).

The participant signed a consent form with which agrees that the participant is voluntarily taking part in the research. This study posed no risks to participants especially since the data collection process was virtual interviews. There was no form of physical contact which may have subjected participants to risks of contracting Covid 19 and otherwise. The consent form clearly states that participation is voluntary and there is no form of financial benefit from the study. Therefore, the participant made an informed decision whether to participate or not before the data collection commenced.

4.8 Pilot Testing of Instruments

O’Leary (2014) view pilot testing as a vital process which allow the researchers to examine questionnaires in relation to a set of participants who have comparable experiences to the actual sample. The pilot study was carried out at the Durban CBD in two tourism businesses identified by the researcher. 4 respondents from the two businesses, and individual interviews were carried out in a similar setting as the anticipated study setting. The aim behind pilot testing the interview schedule of this study remain on identifying any potential difficulties that might be experienced by the researcher when collecting the actual data from selected respondents. This approach was imperative because it helps the researcher to eliminate ambiguities prior to visiting the field, which might limit the examination from obtaining the most accurate information that will help the study to address the objectives adequately (O’Leary, 2014).

4.9 Conclusion

Chapter 4 details the research study style which was demonstrated in Table 4.1. The method explained the research concept, target population, sampling methodology, and sample size, as well as how the researcher used dimensional tools to put this investigation together. This chapter also considered participant selection, data collection, and data analysis. Other sections included an explanation the unpacked data range, and justifications for the study restrictions, as well as measurements of confidentiality. The importance of ethical consideration was also emphasized in this chapter. The section also included a thorough overview of the research approach, including absorbed investigation strategies, the building blocks of study tools and their organization, data collection methods, and data analysis and clarification. The following chapter 5 includes data analysis and interpretation.

CHAPTER FIVE

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

5.1 Introduction

Research is done to address questions that still have unanswered scientific questions or to close knowledge gaps. According to scholars like Magi (2010) and Johnson (2022), it is the interpretation of data that distinctly specifies the accomplishment of objectives and provides answers to research questions, not the analysis of data, which provides all the answers to research questions. This chapter explains how data gathered from various tourism professionals and experts in the chosen study area was analysed and interpreted. Magi (2010) asserts that there are different approaches that can be used in research to interpret findings. The first option combines analysis and interpretation into a single chapter, providing the meanings of the respondents' data and drawing conclusions. The second technique involves performing data analysis independently of data interpretation. The researcher analyses the data, draws conclusions, and then connects the results to the theory that was previously examined and other pertinent research study results.

The first alternative was selected to serve the needs of this research investigation. Evidence from interviewees is given, examined, and evaluated while conclusions are drawn considering the data and pertinent theory. Responses to open-ended questions are displayed graphically, and a narrative commentary is supplied. Themes that were connected to the study objectives emerged from the qualitative data analysis. The results and recommendations of the study are also laid out in this section. The objectives and research questions are restated here to provide this chapter with more direction and clarity.

5.2 Restatement of Objectives and Research Questions

Before the analysis, interpretation, and presentation of data, it is imperative that the researcher restates the objectives and research questions of the study. The aim of this section is to remind the reader of what the study seeks to achieve. The formulated objectives and research questions were as follows:

5.2.1 Study Objectives

Objective 1

To investigate the effect of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).

Objective 2

To explore the solid waste management process in the tourism business in Pietermaritzburg CBD

Objectives 3

To explore how the destination image positioning of the Pietermaritzburg CBD is affecting the tourism business.

5.2.2 Research Questions

Question 1

What effect does solid waste accumulation have on tourism businesses of the Pietermaritzburg Central Business District (CBD)?

Question 2

What is the waste management process in the tourism business in Pietermaritzburg CBD?

Question 3

How does the destination image of Pietermaritzburg CBD affect the tourism business?

The researcher was able to assess whether the predetermined objectives and research questions had been addressed through the analysis and interpretation of the data..

5.3 Demographic Data of Respondents

The use of interviews as the data collection method, the researched conversed with multiple tourism practitioners and management personnel to gather data for analysis. The individual interviews occurred amongst 10 respondents. The respondents were purposively sampled for their role in the tourism business they worked for. This study investigated the research problem and drew insights on the valuable contribution from respondents. Virtual interviews were conducted and recorded for data storage, transcription, and analysis.

Figure 5.1 below depicts an image of the virtual Microsoft Teams meeting that occurred between the research and one of the respondents from the mentioned tourism and conservation organization namely SANBI: KZN National Botanical Gardens. The virtual interviews were paramount to minimise contact, and risk of respondents contracting the Covid-19 virus. The respondents' cameras were turned off during the interviews to protect their identity and ensuring data confidentiality and anonymity. A meeting would be set for the proposed date and time at the convenience of each respondent.



Figure 5.1: Virtual Data Collection on Microsoft Teams

5.3. 1 Biographical Data

The biographical information of the respondents who work for the recognized tourism businesses is included in this sub-section. This

information helped the researcher categorize the various types of responses and perceptions based on the respondent's age, gender, race, level of education, and work experience in the tourism business.

This data was deemed significant since it let the researcher categorise and evaluate data based on the characteristics of respondents. To make the responses of the selected respondents more meaningful and understandable, the data is expressed in the form of various statistical and graphical techniques, which the researcher utilized to illustrate the data before analysing it.

5.3.1.1 Position by Gender Profile

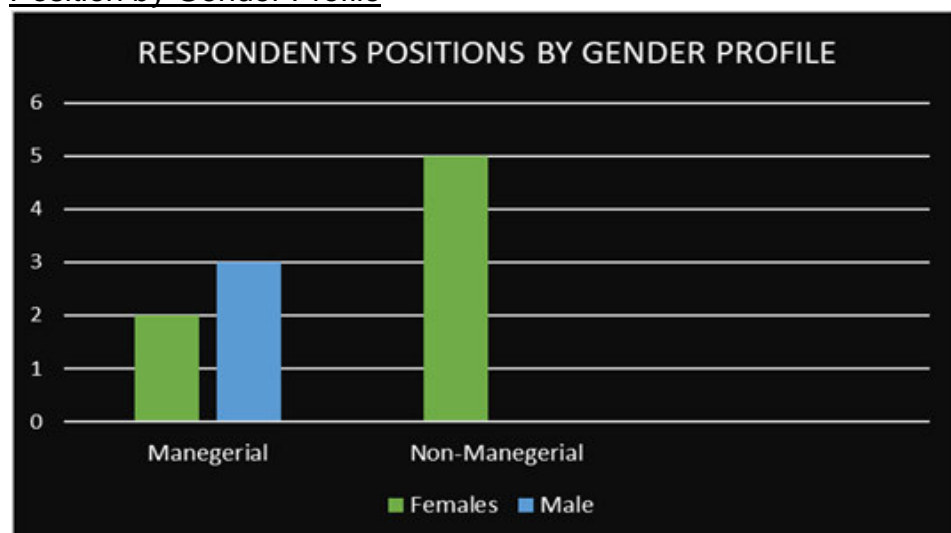


Figure 5.2: Respondents Positions by Gender Profile

Figure 5.2 reveals the gender of respondents (n=10) that were interviewed in the selected tourism businesses. 70% (n=7) were women and 30% males. The graph shows that of all males that were interviewed occupied managerial positions in their business. And only 2 out of 7 women occupied managerial position, whilst the rest (50% of overall respondents) occupy non-managerial positions.

According to Araújo-Vila et al., (2021), the tourism business employs 59% women worldwide, however managerial roles are dominated by men, despite

studies showing that organizations with female presence on executive roles outperform those without women. This is therefore not surprising that all the male respondents occupied managerial positions as reflected in this graph.

5.3.1.2 Age Profile

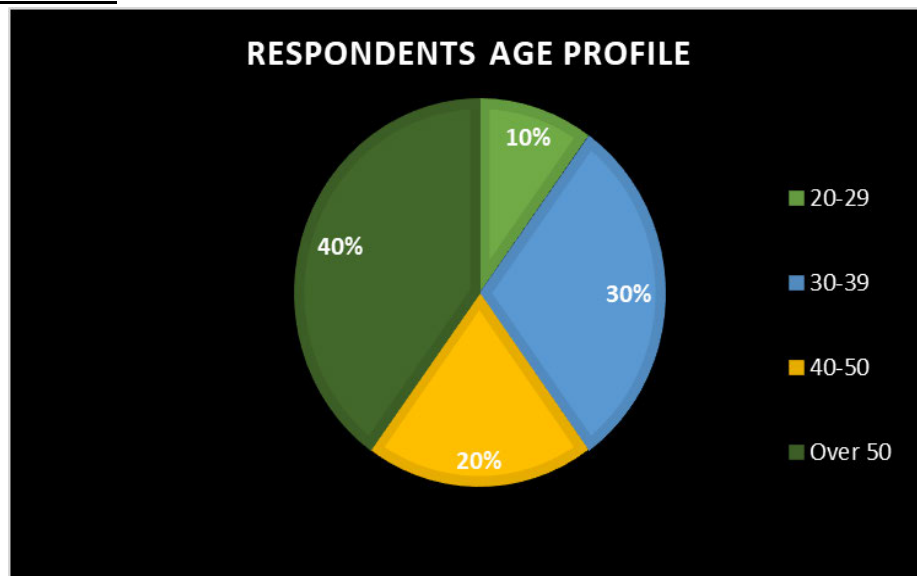


Figure 5.3: Respondents Age Profile

Figure 5.3 shows that 40% (n=4) of respondents are over 50, 30%(n=3) are between the ages of 30-39, 20%(n=2) are between the ages of 40-49 and 10%(n=1) is between the ages 20-29 years old. The dominant age group according to this graph is respondents who are over 50, followed by those between the age range 30-39. Overall, 60%(n=6) of respondents are of mature age.

The dominant age range played an imperative role in this study because according to Kruger, Wessels and Saayman (2014), older employees have greater work experience, they are more committed and possess more diverse skills in their jobs than younger employees.

This was an advantage to this study because the narrative of the Tourism Area Life Cycle (TALC) Stage 6 of Pietermaritzburg was best demonstrated.

5.3.1.3 Race Profile

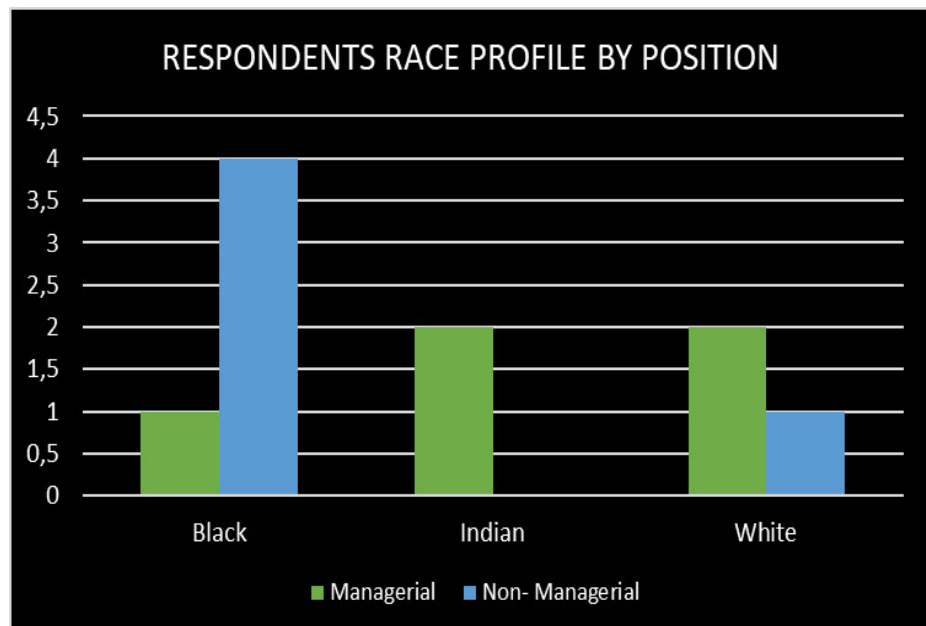


Figure 5.4 Respondents Race Profile by Position

Figure 5.4 shows that 50%(n=5) of respondents were Black with one (male) occupying a managerial position. 20%(n=2) of respondents were Indian females which both occupied managerial positions, 30% (n=3) of respondents were White with 2 males both occupying managerial roles and a woman occupying a non-managerial position.

The racial difference in the Tourism Industry especially where Black culture is a commodity is prevalent. According to the study conducted by Gasa (2019), Black people still serve as just employees for pittance whilst the industry business ownership is predominantly White. This was also echoed by Kubayi-Ngubane (2020b) that even though at least 70% of the Covid-19 Tourism Relief Fund was meant for Black tourism business owners, they could not take away the fact that 56% of businesses were White owned.

This is very much prevalent in the City of Pietermaritzburg, even 28 years post-Apartheid not much has changed. The history of the city and this country still affects tourism business ownership and racial distribution.

5.3.1.4 Work Experience in the Tourism Industry

Figure 5.5 shows that 30%(n=3) have worked in the tourism industry for over 20 years, another 30% (n=3) have worked between 15-20 years. With 20% of respondents have worked for the tourism industry between 6-9 Years and the remaining 10% (n=1) have worked for between 10-14 and 10% (n=1) for less than 5 but above three years, which was an inclusion requirement for study participants. The chart also shows that at least 70% (n=7) of respondents have been working in the tourism industry for over 10 years, which contributes to the study results validity and reliability. The 30%(n=3) of respondents who have been working for at least 9 years and less, also contributed significantly to this study as majority of them are youth (see figure 5.3), and they are very much keen to be involved in the positive transformation of tourism in the city and their respective organizations.



Figure 5.5 Respondents Tourism Industry Experience

5.3.1.5 Educational Profile

Figure 5.6 shows the educational profile of respondents who participated in this study. Respondents with Post Graduate Qualification (PGQ) was

40%(n=4), Bachelor’s Degree/Bachelor of Technology made up 20%(n=2), National Diploma were 30%(n=3) and 10%(n=1) responded had only completed Grade 12. It is imperative to note that 90%(n=9) of all respondents who participated in this study had nationally recognised graduate qualifications.

Graduates not only create their own personal profiles and credentials, but they also progress key skills and attitudes that are necessary for effective tourism market approaches (Wakelin-Theron, Ukpere and Stewart, 2018). This chart proves that the right people occupy the right positions in tourism businesses in the study area (regardless of racial differences amongst respondents), they are skilled personnel, with their expertise and experience, the city could be transformed back to its former Glory and better.

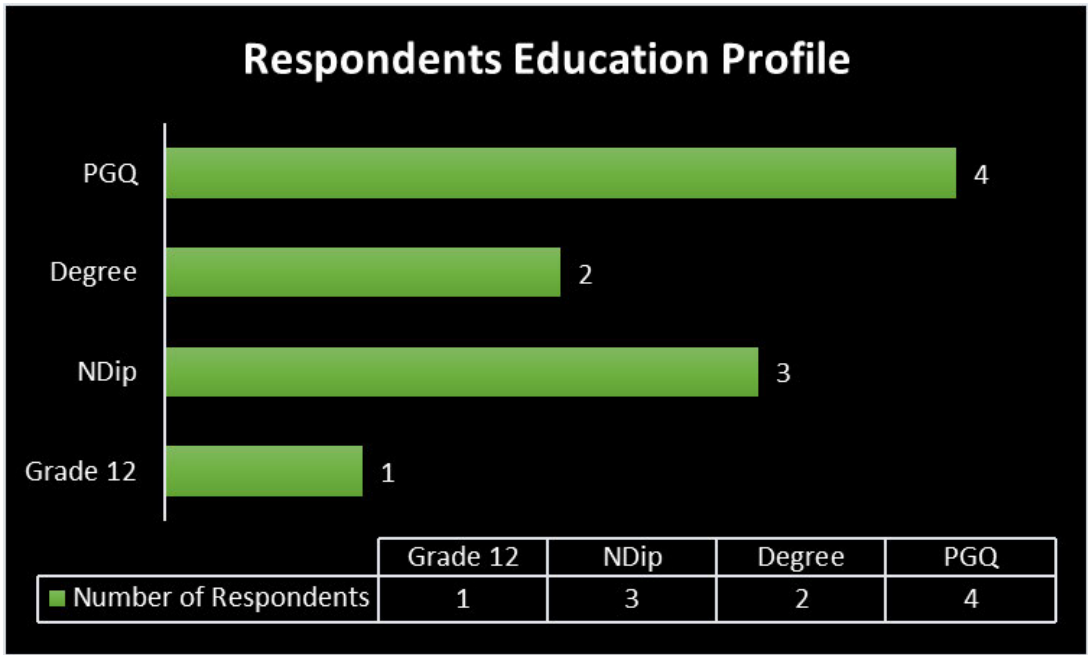


Figure 5.6 Respondents Education Profile

5.3.1.6 Job Titles

Majority of respondents did not have a single job title, but they wore different hats either they occupied managerial positions or not. The reason for this was the scope and size of tourism organizations they represented and their immense work experience in their field. Figure 5.7 shows that a greater number of respondents are involved in Marketing (traditional and digital), Tourism and Environmental Education. Travel agents and tour guide taking a lesser number of the job titles. They primarily all have contact with visitors, people, or tourists. They all must be aware of the current tourism environment to ensure visitor satisfaction in their respective job duties and beyond. Due to the nature of tourism, it requires employees to be jacks of all trades (Schneide and Treisch, 2009).



Figure 5.7: Respondents Job Profile

5.4 Qualitative Data: Managerial and Non-Managerial Employees

According to Thorne (2000), qualitative data is everything that is not quantitative or can't be expressed numerically and is used to generate a set of assumptions, ideas, values, truth, and a better knowledge of reality.

Data analysis, according to Dey (1993), entails dividing data into parts and then weaving the pieces together into an understandable whole in order to show the data's unique components and structure. In this study, the researcher combines both content (verbal data) and framework (thematic, coding, charting, mapping, and interpretations) methods to analyse data to classify, and summarize data. Braun and Chauke go on to say that thematic analysis enables researchers to stay in touch with their acquired data, allowing them to build primary codes, investigate developing subjects, analyze the themes, characterize and discuss the themes, and make well-informed assertions when the data is evaluated. Furthermore, according to Castleberry and Nolen (2018), employing distinct themes aids researchers in following the initial steps of thematic analysis. To put it another way, the rigorous approach tends to assist researchers in reconstructing data with the goal of determining meaning, and then allowing their interpretative expertise to take precedence.

5.4.1 Presentation of Interview Data

This subsection deals with interview data from the tourism business respondents. As stated in chapter 4, the researcher interviewed 10 Tourism business managerial and non-managerial employees at the Pietermaritzburg Central Business District (CBD). The intention was to determine how solid waste accumulated in the CBD is affecting the Tourism business and the policy guidelines that are followed by uMsunduzi Municipality to ensure that waste management is properly implemented.

The interviews covered questions that were converted to the following 10 subheadings used to present data that were gathered from the 10 respondents:

- Waste management process within the tourism business
- Effectiveness of waste management system used in a tourism business
- Effect of Pietermaritzburg image on the tourism business
- Municipal Solid Waste collection and its effectiveness for tourism fluidity
- PMB(CBD) image positioning and its effect on visitor numbers and annual business turnover
- Approaches to customer retention and repeat visits to sustain tourism business
- Approaches to address external business environment
- Anticipated business challenges if the state of PMB(CBD) does not change
- The strategic vision for the tourism organization regarding waste accumulation

5.4.1.1 ***Waste Management Process Within The Tourism Businesses***

This subsection helps us to understand the process of managing waste in different tourism businesses. It allows for navigation of the different ways in which tourism organizations manage their own waste by having a workable system that they use to ensure that their solid waste does not contribute to waste accumulated in the streets of Pietermaritzburg (CBD). Figure 5.8 introduces a model that is used to depict the current waste management process within the different tourism organizations where the interviewed respondents worked.

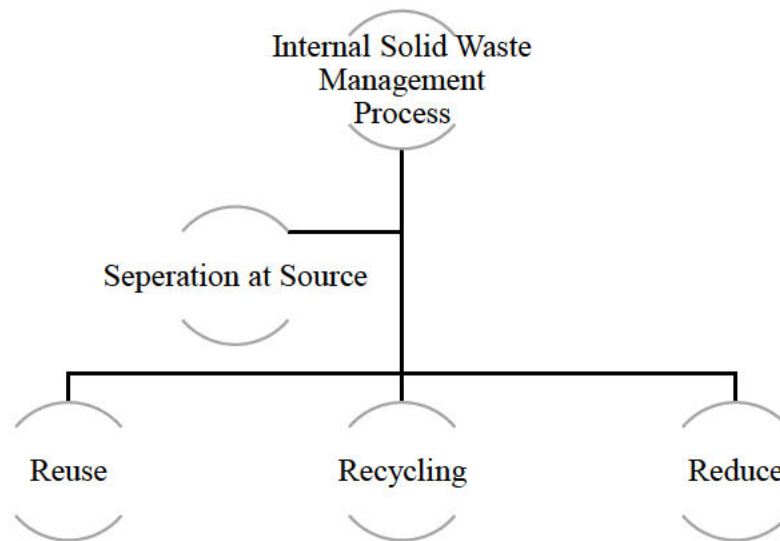


Figure 5.8 Internal Solid Waste Management in Tourism Business

Figure 5.8 indicates that the solid waste management process in most tourism business starts by seperating waste from the source, this includes differentiated bins where visitors can throw in their waste. There are leballled bins for glass, metal, paper, plastic and electronic swaste that are used to sort and separate different solid waste materials. After seperation, majority of organizations have environmental and education programmes, which allows them to reuse different solid waste material, such as papers, plastics and bottles for conservatory and educational purposes (see figure 5.9, 5.10 and 5.11). Of all the solid material that remains, it is collected by different recycling companies around PMB for recycling purposes especially paper and plastic material. All respondents notably argued that in their green campaigns they are however reducing the amount of waste that is built up within their organizations through digitalization. As argued in Chapter 3 of this study, literature encourages seperation at source for especially domestic waste, to ensure that there is a reduction of waste that goes into landfilling (Oelefse,2018., Pitchayanin,2016., and Tyrell,2019).



Figure 5.9: Marion High School Learners with Learning Materials Made out of Reused Items. **Source:** [KZN Museum Instagram Page](#)

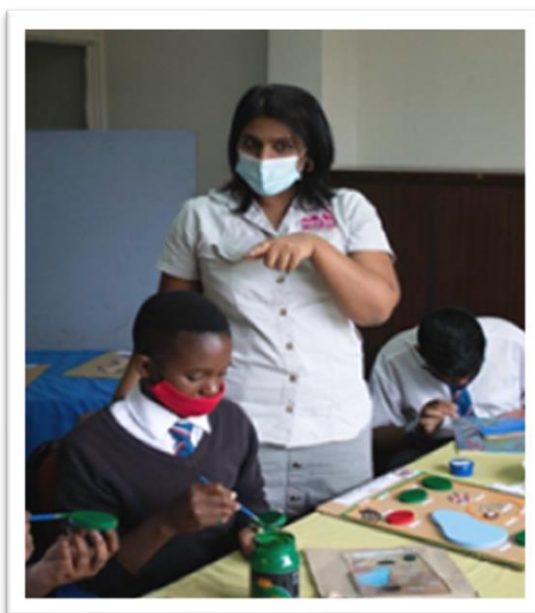


Figure 5.10: Facilitator helping learners create their learning models using reusable items



Figure 5.11: A snake puzzle created out of reusable items.

Source: [KZNMuseum Instagram Page](#)

1st respondent: "... We have refuse collection areas, which is out of sight of the public. Where waste is collected and kept. We also look at collecting and separating waste materials so we would collect our paper, for example separately. We've actually been doing that at the museum even before it was fashionable for as long as I've been at the museum. Paper waste. especially has been collected separately and recycled, I can say for the last 20 years. That's been the process even before that in the days gone by..."

2nd respondent: "...Most of the work that would previously be printed on paper, it is now digitalized and different protective codes are used to protect documents if need be. The outbreak of Covid-19 made us relook the way that we work and how we could best capitalize on technocentric methods of working and save the little money we still have. We are now a fully paperless(workwise) organization and that has saved us a lot of catridge and paper costs..."

3rd respondent: "...But more recently when there's been a lot more focus on climate change and the effects on the environment, the museum has taken the approach to ensure that staff on each floor and in the public areas as well are able to find a space where they can throw or discard plastic and cans or aluminium separately as well as glass. Our education department, they do a lot of programs that are with schools and awareness programs as well in house and outreach that involve using recycled materials. So where they can take some of the items that we collect and channel it and use it for the different programs that they run, they are able to reuse some of the material like that as well..."

It is noteworthy that these tourism businesses have also acknowledged the Waste Management Hierarchy and implemented it in their own way (intentionally so or not) and still striving to ensure waste prevention and reduction in their respective organizations as recommended by the National Waste Management Strategy (NWMS) 2030.

5.4.1.2 *Effectiveness of Internal Waste Management System Used In A Tourism Business*

The importance of understanding how waste is managed within all the tourism businesses in PMB(CBD) is because literature labels tourism as a major contributor to waste, with the Hospitality sector contributing most of the industry's carbon footprint as highlighted in Chapter 3 of this study. The Hospitality sector is expected to reduce its carbon footprint by 66% in 2030 (UNWTO,2018). It was therefore imperative to ask how the organizations how they managed their waste (see subsection 5.4.1.1), and establish how effective their management system has it been to ensure that waste accumulation is minimised and prevented where possible.

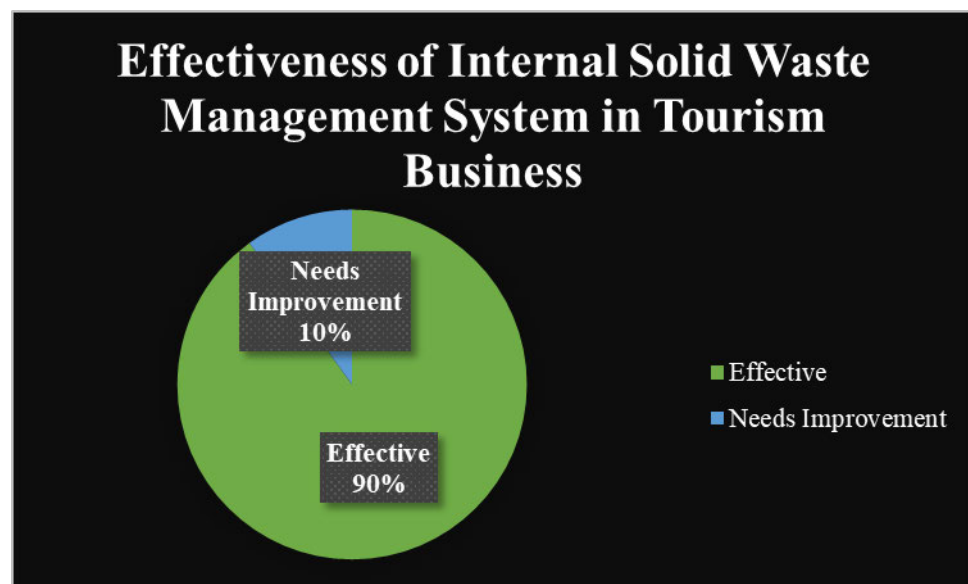


Figure 5.12: Effectiveness of Internal Solid Waste Management System in Tourism Business

Figure 5.12 shows that 90%(n=9) of respondents said that their internal waste management system was quite effective for their organizations. How they managed internal waste made the process easier because they have dedicated personnel who are responsible for overall waste collection and

separation at the back areas, they also ensure that all employees within the organization are responsible when it comes to separating waste and that they practise the ethos of their organization. These respondents further highlighted that their educational programmes are also for empowerment, to ensure that learners practise the same waste management principles at home and teach their elders as well. 10%(n=1) of the respondents noted that as much as the similar principle is applied in his workplace, they still struggle because of the scope of their organization and lack of resources, and a majority of their waste still goes to landfilling if vagrants have not come to collect recyclable waste. He further highlighted that they are doing their best but there is ample room for improvement.

1st Respondent: *“...Our waste management system, yes it has been effective. It definitely reduces the amount of waste then that is discarded through our regular waste system, which is the bins that are placed in the backyard. It's far less waste material that gets accumulated there when it comes to discarding that as well. It's managed more frequently than just waiting for the refuse removal truck to come and collect it just so that we also don't end up accumulating too much of waste at the back. But being able to separate the waste as well and also having the Waste paper company come and collect the paper also just reduces the load on our maintenance staff as well. When it comes to having to dispose of the waste material so it has been effective, yes, definitely well...”*

2nd Respondent: *“...The operation itself, I would say is very basic. You know, there's no rocket science around it to a point that it's something that is easily doable by anyone. So it's working currently because we have not reached a point where whereby we couldn't or something shows some kind of shortcomings. But I think that area I'm adding that we maybe can improve as an institution...”*

Tourism businesses in PMB(CBD) have found workable waste management systems in their organizations and they are effective for the business aesthetics

and premises' maintenance. Internal waste management is important because waste collection by the municipality is a governmental service to the businesses. All internal collection and separate must happen before MSW come for collection to landfill site.

5.4.1.3 ***Effect of Pietermaritzburg Image on the Tourism Business***

The tourism destination attractiveness motivates visitors to travel, and spend time at that destination. The attractiveness is perceptionally driven and relies on the customers stimuli (Reitsamer and Brunner-Sperdin), and literature has produced empirical evidence on visitor behavior, destination perception and destination choice. In a nutshell, the desired destination image is what drives visitors to different destinations. It was important for this study to enquire how the tourism businesses perceived PMB(CBD) as a tourism destination and how that affected the tourism business in the area.

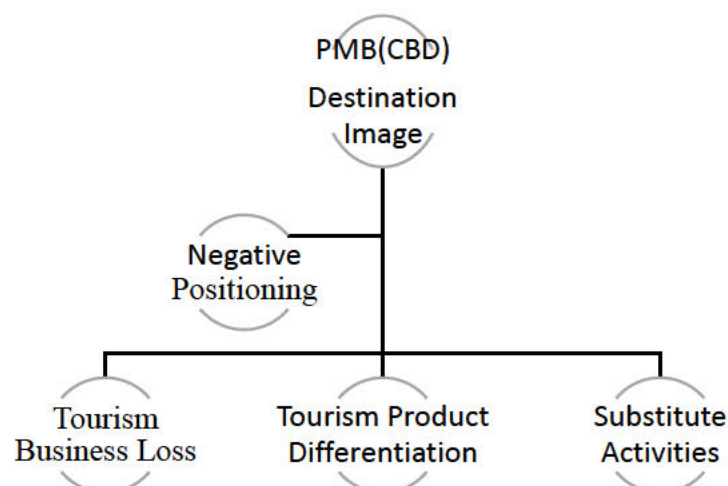


Figure 5.13: Effect of Negative Positioning of Pietermaritzburg(CBD)

Figure 5.13 shows that PMB(CBD) is negatively perceived by the tourism businesses. The respondents felt that the current image of the CBD was costing them business because high spending tourists are no longer interested in what the tourism businesses have to offer them. They highlighted that tourists who would come to their organization were lost to substitute activities outside the CBD, which means they no longer saw value in the tourism attractions around in the CBD. The most cost that respondents had to mention was that

they had to invest in Tourism Product differentiation to appeal to visitors, which is one strategy that works adhoc. PMB(CBD) is known for its beautiful Victorian style buildings, historical statues such as that of Ghandi, and its contribution to the history and heritage in the Apartheid Era. Poor maintenance of these buildings and sites have primarily lost the appeal of these tourism attractions. Some of the major concerns that were expressed by respondents of these tourism businesses are shown in Figure 5.14.

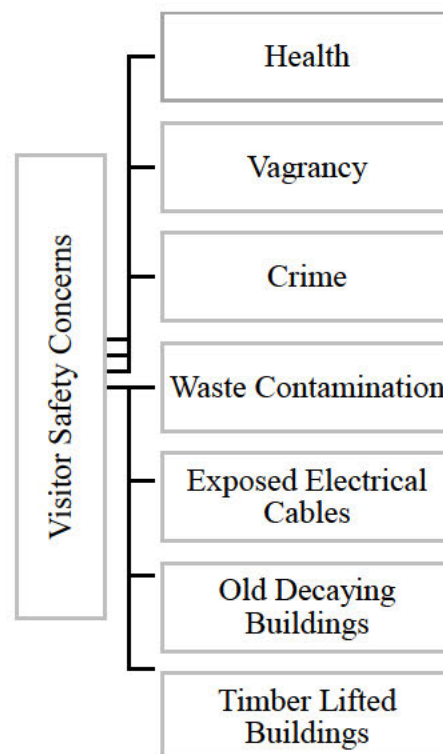


Figure 5.14: Visitor Safety Concerns

Figure 5.14 shows that respondents in their respective organizations had some concerns which they believe also affect the image of PMB(CBD) and these greatly affect the tourism business in the area. Respondents highlighted that visitors are concerned about their health because of the amount of waste in the street of PMB(CBD), poor ablution services, and the smell of urine in almost every street corner. One respondent highlighted that she even went to the City Hall Building (municipal offices) to report on the disgrace of the state of ablutions in the city, but no one attended to her. She later wrote an article to The Witness but things have not improved even then.

The second visitor concern was that there is a high number of vagrants in PMB(CBD) and that has put a lot of visitor lives risk because they are susceptible to crime. Vagrants also setup sleeping space outside some of these tourism businesses and this tarnishes the aesthetics of the business and chases away visitors. This is in conjunction with high rate of crime in the PMB(CBD), where a lot of cases have been reported and PMB labeled as a crime Capital. Anyone would not like to subject themselves to crime and thus visitors would rather go where it is safe for them.

Waste contamination is one other major visitor concern because not only does it make the area look filthy, but it also has high health risks. Blocked drains from waste causes flooding during rainy days. Flies and smell chases away potential visitors, and that is lack of service delivery from the municipality and also miseducation of people who still throw away their waste on the floors instead of bins.

When electric companies dig up pavements, they do not cement and cleanup the pavements and leave cables exposed which is a risk to the public and visitors. Rubble from that digging is never cleaned up, which proves lack of accountability from companies, and lack of consideration of people in business and general.

Old decaying buildings and timber lifted buildings were also major concerns for visitors because they house a lot of vagrants which may expose visitors to danger and crime. This is also another major factor which contributes to the negative positioning of PMB(CBD) as a preferred tourism destination.

Table 5.1 Articles Reporting on the state of PMB(CBD) from 2021-2022

Author	Title of the Article	Date	Publication
1 Bongani Hans	<i>Pietermaritzburg's sad state of decay</i>	4/02/2021	IOL Online
2 Chris Ndaliso	<i>Pietermaritzburg is a 'collapsed city'</i>	10/02/2021	IOL Online
3 Derick Alberts	<i>Pietermaritzburg: The bad municipality malaise</i>	13/03/2021	Daily Maverick
4 Sandisiwe Shoba	<i>Pietermaritzburg: My city, my shame</i>	09/04/2021	Daily Maverick
5 Siyamthanda Capa	<i>Service delivery grinds to a halt in Pietermaritzburg as Msunduzi runs out of funds</i>	19/06/2021	The Witness
6 Siyamthanda Capa	<i>Inmates to start cleaning Pietermaritzburg streets soon</i>	01/07/2021	The Witness
7 Shorne Bennie	<i>Sopa 2022: Key areas of focus</i>	02/02/2022	Capital Newspapers
8 Sibusio Mboto	<i>Premier issues warning to Msunduzi Municipality staff who are not doing their jobs</i>	08/04/2022	The Mercury
9 Mfundo Mkhize	<i>Pietermaritzburg walkabout reveals a dirty, neglected city</i>	01/02/2022	Sunday Times
10 Sakhiseni Nxumalo	<i>2021: A dangerous year in Pietermaritzburg</i>	05/01/2022	The Witness

The local newspapers have been reporting on the state of the PMB(CBD) and Msunduzi Municipality from as early as 2008, Table 5.1 shows 10 articles that would contribute to visitor concerns and Pietermaritzburg negative destination

image. Respondents spoke at length about the image of PMB(CBD), and this is what some had to say about it.

1st respondent: "...Definitely the image of Pietermaritzburg is a very bleak one when it comes to, I think just to put it very crudely, the amount of fault that there is, it's poor. It's very poor as a person who lives in Pietermaritzburg. It's just gotten worse over the years and in terms of the business we make a concerted effort to making sure that the area around the us is neat and clean, as much as we can. However, we cannot control what the rest of the environment around us looks like..."

2nd respondent: "...PMB has all kinds of fault, including things like rubble. sometimes if there's any kind of street maintenance work that is being done, they don't clean up when they're done. It's all those different levels of waste and filth and decay that people end up being exposed to and our visitors are very vocal about it, and to us in person. Worse on social media and it's something that we can tangibly say people complain about that they could, and it also then leads to people feeling unsafe. I think the physical decay of what the city looks like and the area in which they are then exposed to like if they have to come to the organization, it creates that feeling of of not feeling safe..."

3rd respondent: "...People would write about it on social media and make comments that they just simply do not feel safe. Dirt and dump litter and faults that people get exposed to, definitely contributes to that feeling of being unsafe of, not feeling like it's a safe and secure environment, so it does affect tourism. I think in the city and I would say we work very hard to make sure that we reach people and we invite people to the business. I think if we didn't work as hard as we do to have programs in place to invite people, I don't think that people would just naturally come to the us. I think people would come if maybe the environment was safer, better, more attractive. People do complain about not wanting to come into town because they don't feel safe. But when we have the right programs in place, people do come come, so it has it. It definitely has a negative effect on on on our tourism..."



Figure 5.15: Uncollected waste accumulated on the street



Figure 5.16: Puddles of contaminated water and waste in potholed street



Figure 5.17: Rubble remains after street was dug up

Source: The Witness

5.4.1.4 ***Municipal Solid Waste Collection And Its Effectiveness For Tourism Fluidity***

Msunduzi Municipality in which the PMB(CBD) falls under, has a set schedule for waste collection in the municipality (see Figure 5.18). It is evident from the schedule that all areas are reserved one waste collection day a week, and the PMB(CBD) is also allocated a once off collection a week. Respondents (n=6) also indicated that waste was collected once a week, with 4 respondents who argued that their waste was collected daily, however that was due to them being located at a bus terminal and by the taxi rank which meant there are high volumes of travellers who and that meant high volumes of waste as well. The respondents also highlighted that lack of availability of enough bins outside tourism business areas and the rest of the CBD was one major contribution to waste accumulated on the streets of Pietermaritzburg.

Table 5.2 shows the number of times waste is collected in each tourism business and number of bins provided by the municipality outside the organizations.

Table 5.2 Waste collection and number of municipal bins provided in tourism business areas

Name of Tourism Business	Waste Collection A Week and Day	Number of Bins Available
KZN Museum	Once on Tuesday	None
Tathnam Art Gallery	Once on Tuesday	One
SANBI:KZN National Botanical Gardens	Once on Tuesday	None
Msunduzi Museum	Daily	One
African Link	Daily	Two

Uncollected waste not has only economic impact but also environmental impact such as visual impacts, air contamination, odors and green-house gasses (GHG) emission, vectors of diseases, surface water and groundwater pollution (Ferronato and Toretta, 2019). It was imperative for this study to find out if the municipality waste collection plan was feasible for the tourism. All respondents were not impressed with the frequency of waste collection and incited that the waste collection plan should be revised to accommodate tourism, especially in the CBD where there is a great number of people, those who live in the CBD, own different businesses and those who work there. Respondents expressed that lack of bins, also meant high waste volumes around their areas which chases away visitors, and they felt government has a “laid back approach” when it comes to issues of Tourism and service delivery in general. Qouted are respondents from different tourism businesses:

1st respondent: “... *They collect once a week. But we don't wait for the waste collection once a week. I know our staff dispose of the waste more frequently just to ensure that we don't have that build up of waste. I definitely think that being in the city center and being exposed to as much fault as we are. It needs to be more frequent. There needs to be a more visible presence of the cleaners that are actually making more effort to ensure that the city is clean. I'm quite convinced that it does contribute to us not having as many visitors as we should have...*”

2nd respondent: “... *You never find that we have our waste not collected, but for when they are striking they do not collect. But now maybe we can give it to them that they are effective provided that they do collect but we we cannot really match ours is it because of sheer efficiency or is it because of our location...*”

It is of paramount to note that there is an inconsistency in waste collection for tourism business in one CBD. That alone illustrates the lack of effort to ensure service delivery equity even in one area.

WASTE COLLECTION PLAN										
		MONDAY		TUESDAY		WEDNESDAY		THURSDAY		FRIDAY
	WARD		WARD		WARD		WARD		WARD	
ZONE 2	22	IMBALI 3	13	IMBALI 13	10	AZALEA	15	IMBALI 18	17	IMBALI 13
	23	ASHDOWN 1		IMBALI 15		SLANG		IMBALI BB	15	IMBALI UNIT J
	21	IMBALI CC	23	ASHDOWN 2	20	BUFFER	16	PATA	21	DAMBUZA
	12	SGODINI / NHLAZATSHE PATA 30	17	EDENDALE BY NDUDUZO EDENDALE IMBALI UNIT 18		CALUZA	19	QELANI IMBALI TEHUIS FISHING RD		
ZONE 3			24	BISLEY RICHMOND CREST	23	IMBALI CROSSING/PEACE VALLEY LAY CENTRE IMBALI 1	19	IMBALI 2 VIETNAM IMBALI 2	19	IMBALI 2 VIETNAM
					19				15	IMBALI 2 VIETNAM
ZONE 4	24	BISLEY RICHMOND CREST	27	WEMBLEY PRESTBURY	35	SOBANTU ASHBURTON	35	MOUNTAIN RISE	33	LOWER CBD
	27	ALEXANDRA COLLEGE ROAD	24	WEMBLEY CHASEVALLEY	37				27	NEWTON
	24	ORIBI	24	CHASEVALLEY					27	SCOTTVILLE UKZN
	24	BISLEY	24	HILTON					27	PELHAM
	24	GRANGE BISLEY							27	SCOTTVILLE GOLDEN HORSE AREA
									27	SCOTTVILLE BY CHECKERS UPPER TOWN
ZONE 5	34	HAYFIELDS	34	NAPIERVILLE	30	NORTHDALE	32	WOODLANDS GEORGETOWN	29	COPESVILLE
		LINCOLN MEADE		SIGNAL HILL		BOMBAY HEIGHTS		SITE ELEVEN	25	TOWNBUSH AREA
	34	LINCOLN MEADE	34	CLAREDON		NORTHDALE	34	PANORAMA	31	NORTHDALE AREA
	34	AREA	34	TOWNBUSH	30	ORTHMANN	31	NORTHDALE AREA CIVIC CENTRE	34	THEMBALIHLE
		PELHAM BISLEY	34	OLD HOWICK		NORTHDALE	30	ALLANDALE	34	HAYFIELDS
	34	CLELAND	34	MONTROSE	30	ALLANDALE	31	NORTHDALE AREA		
	34	ORIBI	34	BLACKRIDGE		NORTHDALE AREA	34	EASTWOOD		
	24	SCOTTVILLE	34	WOODLANDS EXT	28	HEIGHTS	34	GLENWOOD		
		EXTENTION	34	BEACON HILL	31	NORTHDALE AREA		EASTWOOD		
	34	GRANGE WESTGATE		PRESTBURY			34	CINDERELLA		
	34	CLELAND HAYFIELDS HAYFIELDS					29	HONEYVILLE		

Figure 5.18: Msunduzi Municipality Waste Collection Plan

Source: www.msunduzi.gov.za

5.4.1.5 ***PMB(CBD) Positioning And It's Effect On Visitor Numbers And Annual Business Turnover***

This subsection gives an interpretation of sub-themes that emerged from the interviews when the respondents were asked how the negative positioning of PMB(CBD) has specifically affected their visitor numbers and business annual turnover. Figure 5.19 shows some of the frequent words that were said by respondents to highlight the effect of PMB(CBD)'s negative positioning.

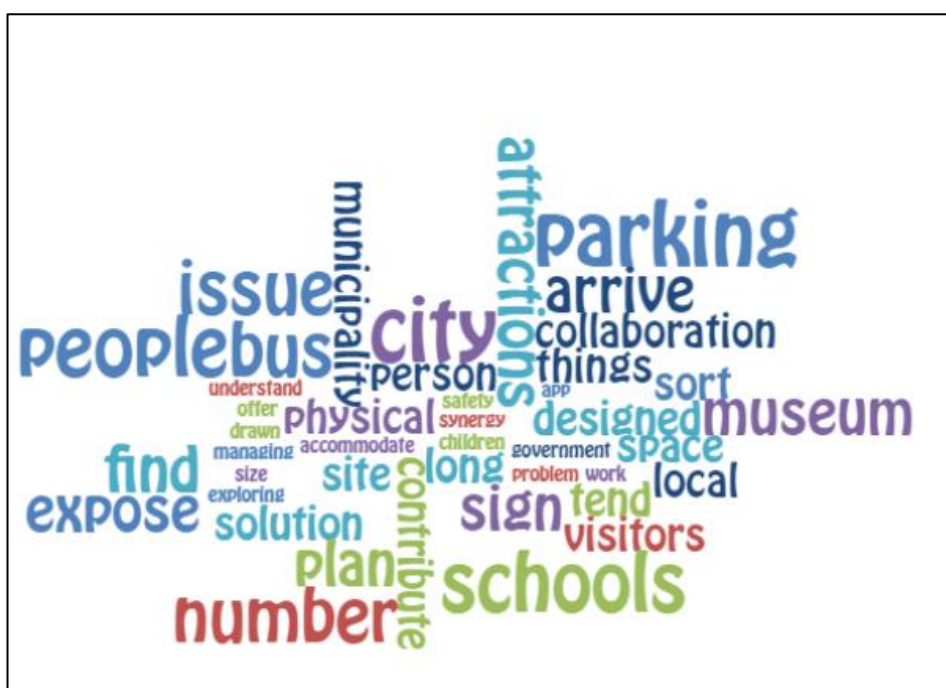


Figure 5.19 Wordle of responses on this subsection

Most respondents highlighted that their marketing efforts have paid off with regards to attracting visitors in their businesses. However, they capitalised mostly on segmenting their different markets and were proactive in inviting visitors to their different attractions. The respondents did not have the exact figures of how many visitors they have lost or gained, and how has that benefitted or made loss for the business. It's imperative to structure the visitor segments according to the respondents.

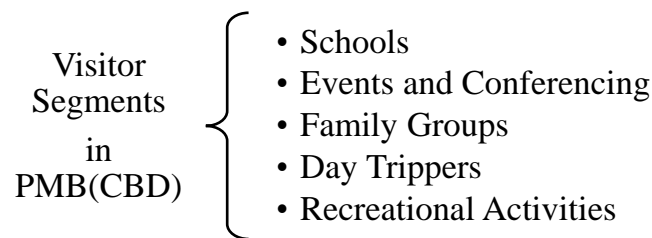


Figure 5.20: Visitor Segments in PMB(CBD) Tourism Business

As shown in Figure 5.20, schools are a major and sustainable segment in these tourism businesses, all respondents said their involvement of schools through educational programmes have had a major impact in ensuring that their doors are always open. However, 60% of respondents also mentioned that their organizations are partially subsidised by government, such as staff salaries are paid by the provincial government, the Department of Art and Culture and the Department of Environmental Affairs respectively. Another respondent also mentioned that if they solely depended on only “tourism”, day trippers and family groups, their doors would have long closed. The subsidy from the provincial government was a major contributor in ensuring they have employees and are able to meet some business expenses.

The respondents immensely spoke about lack of parking spaces, accommodation facilities (with one major and oldest accommodation that was proposed for the sample of this study closed down in 2021), collaboration between tourism and local government, synergy amongst the tourism businesses, signage, deteriorating infrastructure, which contributed immensely on their visitor numbers which would subsequently affect their annual turnover. According to the Tourism Whitepaper (1996:43-44), the role of local government is to support tourism includes but is not limited to the following:

- *responsible land-use planning, urban and rural development*
- *control over land-use and land allocation*

- *provision and maintenance of tourist services, sites and attractions, e.g. camping and caravan sites, recreational facilities (parks, historical buildings, sports facilities, theatres, museums, etc.) and public services*
- *provision of road signs in accordance with nationally established guidelines*
- *market and promote specific local attractions and disseminate information in this regard*
- *control public health and safety*
- *facilitate the participation of local communities in the tourism industry*
- *own and maintain certain plant, e.g. ports and airports*
- *provide adequate parking, also for coaches*
- *facilitate the establishment of appropriate public transportation services, e.g. taxi services*
- *license establishments in accordance with national framework*
- *promote and financially support the establishment of local publicity associations/community tourism and marketing organisations to facilitate, market, coordinate and administer tourism initiatives*

Contrary to the Tourism Whitepaper, the respondents felt that the local government was not doing enough to offer support for tourism in PMB, as there is no tourism structure in Msunduzi Municipality that is responsible for the promotion of Pietermaritzburg in the province nor the country. All attractions are responsible for their own marketing and promotion, they put up their own signage and would recommend parking areas which are far from the attractions, these responsibility should be shared with the local government as they form part of their role. There is no synergy between the local government and tourism business in PMB(CBD).

1ST respondent: *"...It is difficult but we tend to take on a more engaging role when it comes to talking to visitors about what their options are. For example, if it's just a small number of people, we would encourage them to park in our parking that we normally use for schools, especially when we know schools are not coming in. But other than that we we don't have the resources to do*

much about it. The physical space in the city is limited, which is what also contributed to the notion of looking at a new site for the museum so in the long run the plan is to move the museum to its new location which will resolve the parking issue. The parking issue is not just for your general visitors. More significantly, the parking issue affects schools, so if a school group have to arrive in a bus, the way in which the street is designed and the way in which the bus is designed as well, it doesn't contribute to the safety of the kids when they arrive, especially if you have several buses arriving at the same time. We just don't have the the physical means to accommodate the safe offloading of those children and nor can we offer parking space for buses...”

Lack of local government support has implications on tourism development in any area or region, with PMB needing the most intervention. For tourism business to depend highly on one market segment for sustainable business is but of high concern for the future of tourism in PMB.

5.4.1.6 Approaches To Customer Retention And Repeat Visits To Sustain Tourism Business

The respondents were sked what are some of the approaches their business had in place to retain current customers and ensure repeat visits from their different market segments as discussed in subsection 5.4.1.5 and shown in Digram 5.1 of the same subsection.

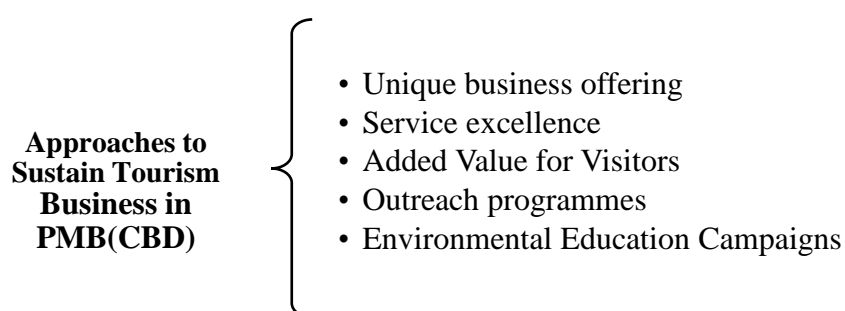


Figure 5.21: Approaches to Sustain Tourism Business in PMB(CBD)

Figure 5.21 shows the emerging themes that were in unison with all respondents. All respondents said each tourism business had a unique offering to their customers. Either a museum, travel agency, garden or art gallery, they all have unique features and attractions that ensured visitors would want to come back and experience those different offerings. They further stipulated that their service excellence on site was also what kept visitors and repeat business. According to Morgan (2019), the level of customer service visitors receive will determine whether they come back for the visit or they warn others not to go to the attractions. It was important for this study to determine what these tourism businesses have to that would make customers come back.

Respondents also highlighted that they have added value that could never be found anywhere else besides their organization, and they capitalise on this to keep customers coming, and by introducing customers to their business through outreach programmes and environmental educational programmes. These also add value that customers look for when they come to the business. According to literature, value in tourism is determined by the infrastructure and facilities. Shen, 2016 describes perceived value as 6 dimensions which result in either a positive or negative visitor experience and can contribute to whether visitors recommend your business or not.

Table 5.3 shows what are the perceived tourism values for holistic visitor experience. It would be safe to say that the respondents said they offer all these perceived values for visitors and even with the city not having appropriate infrastructure and other important amenities, they however had their own internal facilities and infrastructure which would have a positive impact on visitor experience. Trained staff members also contribute in creating a positive visitor experience by offering excellent customer service, tourism interpretation that is not only educational but adds to knowledge and subject of the different attraction items.

Table 5.3: Percieved Value in Tourism

<i>Percieved Value</i>	<i>Definition</i>
Functional Value	is the perceived utility obtained from the performance of a product. In the tourism context, it refers to the facilities and infrastructure of a destination.
Social Value	the perceived utility obtained from the ability of a product or service to create or enhance personal images, such as reputation, social status, ethnic identity, and personal characteristics.
Emotional Value	the perceived utility of a product or a service to generate feelings or emotional changes
Percieved Sacrifice	The perceived sacrifice refers to what consumers pay or give up, such as monetary cost, time cost, and perceived risk.
Experiential Value	the perceived utility of a product or a service to offer enjoyment, entertainment, freedom, and escapism
Epistemic Value	the perceived utility of a product or a service to arouse curiosity, provide novelty, and enhance knowledge

Source: Shen,2016

Respondents had this to say about value they sell to customers to ensure they retain them and get repeat visits:

1st respondent: *"...I think we definitely have something unique to offer, and schools and visitors see the value in that. But we work very hard to ensuring that whatever we offer is of value and to make sure that it's a package that people want. So despite the circumstances in the city we have worked really, really hard to overcome by offering added value in whatever we do. So even with schools where we cannot accommodate a school, we would go to a school..."*

2nd respondent: *"...Remember before you start selling, you have to know who are you competing with and then we start selling, its not the price that we sell, but we sell the value. We say we're the premier outdoor venue that makes people enjoy the fullness of nature, we have to exhibit that premier path and*

also the experience of being in the outdoors. Those are the things that keep people in the organization because excellence is the order of the day..."

3rd respondent: "...If I'm sitting in London or New York or Dubai, I know what I'm selling. I know what I'm what I'm costing. I'm not playing games. Oh, the 1st 10 years of our business, we focus so much on what we call the Freedom Route, which I explained to you at the beginning and the heart of the Freedom Route is based in Pietermaritzburg and we would bring in American tourists, UK tourists and they would come in and have a cup of tea with the mayor and just give them slightly different experience so they see that this is a real, you know, people like to be made to feel special. And we found that the whole area is just not conducive to be able to conduct those things because it's filthy and is hassled by vagrants. We now take our tourists to Howick, atleast they see the Midlans meander and Howick falls..."

From the quoted respondents, it is evident that they believe in satisfying all perceived values for tourism experience in their business and that is what has kept them in business for so long and has retained visitors sustained repeat visits in the business. It is however not clear whether these perceived values are fully known by respondents or they are just a packaged as what they believe they offer visitors.

5.4.1.7 Approaches To Address External Business Environment

During the course of data collection for this study, there were other external environmental factors that have affected the tourism industry as a whole, the major one was the outbreak of Covid-19 Pandemic. It was imperative for this study to find out how the tourism businesses were approaching the effects of the pandemic. Also, from the 9th July 2021, looting began in the city which also had a great impact on tourism in the whole province and especially PMB(CBD) where the aftermath greatly affected an already staggering economic activities and public service delivery, with numerous xenophobic attacks reported.



Figure 5.22: Aftermath of looting leaves piles of waste in the PMB(CBD)



Figure 5.23 Piles of waste after looting outside SAB in PMB



Figure 5.24 The Brookside mall that is on the East side of the PMB(CBD) was burnt down during looting.

Source: The Witness

The external business environment will always have an impact in how tourism business is conducted and it is up to the tourism business to be proactive in their approach by having contingency plans in place and in a case where they need to be reactive, bounce back to eliminate the problem or see it as an opportunity to enhance their product to adapt to the current environmental changes. The UNWTO,2021 ampasizes that, *“The crisis is an opportunity to rethink how tourism interacts with our societies, other economic sectors and our natural resources and ecosystems; to measure and manage it better; to ensure a fair distribution of its benefits and to advance the transition towards a carbon neutral and resilient tourism economy.”* **Figure 5.25** shows the 6 factors that affect the external business environment, they are namely; social, political, natural, technological, legal,economic, and technological.

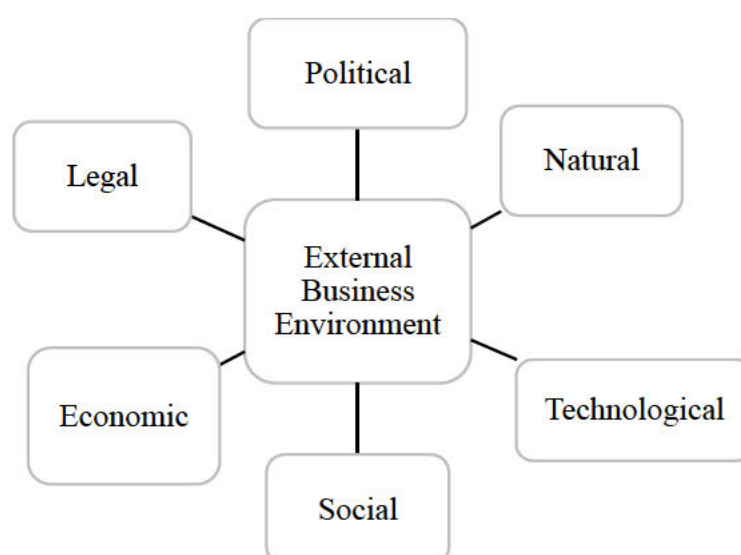


Figure 5.25 Macro environmental factors that affect the business

Source: George,2019

The respondents were very much concerned at the state of the external environment in Pietermaritzburg as a whole. The outbreak of Covid-19 caused a scare for the tourism business especially small and medium enterprises. The pandemic meant closing of doors for many businesses and some did not

survive after the lift of Covid-19 restrictions such as the Imperial Hotel which is now being converted to a students accommodation.

Respondents said the social environment in Pietermaritzburg (PMB) is not conducive for the tourism business because there is lack of tolerance, high crime rates and safety concerns which prevent visitors from exploring the different tourism attraction in PMB. This was the main reason the respondents came up with outreach programmes to fill the needs gap, and taking the attraction to the people.

The respondents also said that the political environment is also to blame for the instabilities that is experienced by PM, this was inclusive of the looting which happened after the sentencing of the former president Jacob Zuma. Other than looting, the issue of waste management's ineffectiveness, lack of tourism support and promotion, is also politically included, where the local government is not delivering the required services to the business and people in general. The city constantly has loadshedding and water cuts, which affects business.

The Legal factor also has a negative impact on tourism business because they felt that there was no sense of accountability from the local government because they could easily get away with corruption and fraud which has been the most commonly reported problem in the South African Governance. Chapter 2 of this study highlights the legal framework of defrauding government and Public Finance, which hinders proper service delivery. This also flaws some of Human Resource procedures that are not inline with the law, where Cadre deployment and unqualified people occupy key positions. Hence, the importance of this study. Respondents felt that their hands were tied because even if they report problems, now one is ever willing to hear them, not even the justice system.

The respondents said that they were able to capitalise on new technologies during the Covid-19 pandemic, which has fostered the culture of digitalization in their business. They would have meetings via Zoom or Teams, host educational and environmental programmes through webinars, and also be

more active on their digital marketing. Online presence was an opportunity to diversify product and adapt to the new normal. The Covid-19 was a natural outbreak, and the respondents felt it had a great impact on how they view business operations and the need of some business aspects.

Economically the external environment has always affected them, which meant hiking entrance prices to recover from almost 2 years of restrictions, with others mentioning that they previously did not charge for some services, but to recover from the pandemic they had to start charging visitors for those services. This also meant cutting down on a lot of costs and find alternative ways to meet different business needs. Respondents said they are still recovering from the pandemic. The issue of waste management is still hanging and ongoing in PMB(CBD), they felt that it oppresses their operation and defeats purpose.

The quoted respondents had this to say about the external environment:

1ST respondent: *"...When you look at other factors like COVID for example in the two years that we've been subjected to being affected by lockdown regulations and that kind of thing we carried on, we carried on even though our doors weren't open, we started to really focus on building on our online presence. For example, with our adult visitors and family groups. When we found that those numbers started dwindling, we started re shaping our programs that would suit the different target audience..."*

2nd respondent: *"...When you are looking at your PESTLE, you need to marry it with your SWOT analysis. But when you looking at your SWOT analysis, you are not looking at your SWOT analysis in a traditional way. You looking at it in an upside down way. How? When you're looking at your SWOT analysis, you don't start with your strengths and weaknesses, you start with the threats and the opportunities before you go to strengths and weaknesses. If you're saying you have a strength, it's a strength against what? How are you measuring your strength? Because strengths are the things that are helping you to seize the opportunities..."*

3rd respondent: *“...I think the municipality must be held accountable. I really think that some of us need to take the municipality to court for what they have done to our city. Maybe that's the only time they will start understanding the implications of it, because unless you not properly qualified in your jobs as a leader of economic development or not, you wasting your time...”*

4th respondent: *“...There's just no water on our floor and it's now affected our flow in the last few weeks alone, I can't tell you if you just have to look at our Facebook page to see how many times we had to close because there was no water in town. So the city itself. I don't think that they feel any responsibility. When it comes to tourists based institutions struggling, they certainly show no care or concern. And there's no effort. All our marketing efforts are our own. We do not partner with them. They do not offer us any support. They do not offer any kind of big picture marketing of the city to say that here's our efforts as a city that we're bringing people in and we're doing something about the state of the city and that would benefit the institutions or the different organizations in the city...”*

Table 5.4 echoses the sentiments of the respondents, as it is evident that a flawed municipality cannot provide essential services whilst it is still trying to recover from so many faults withing the organization. There is a great impact of the external business environment that has hit hard on tourism business in PMB and businesses are doing all they can to strategically move forward regardless of the situation. The amount of money that was used to pay over 100 ghost workers, and was frauded withing the municipality should have been used to cater for service delivery needs of the municipality, which is not happening, therefore affecting the overall social wellbeing of the people and businesses operating in the municipality.

Table 5.4 Local newspaper articles reporting on issues of fraud and corruption in Msunduzi Municipality

Author/s	Title	Date	Publication
Paddy Harper	<i>Millions lost in scam at dysfunctional municipality</i>	19/09/2019	Mail&Guardian
Nokuthula Ntuli	<i>Police investigating 12 cases of fraud and corruption at Msunduzi</i>	23/10/2020	The Witness
Cogta_usr	<i>Kzncogta Tables Forensic Reports Into Irregular Expenditure At Msunduzi And Richmond</i>	28/01/2021	Kzncogta.gov.za
Lyse Comins	<i>Msunduzi Municipality probe exposes R290m tender scandal</i>	02/10/2021	The Mercury
Siyamthanda Capa	<i>Msunduzi audit uncovers fraud worth over R64 million</i>	29/07/2021	The Witness
Cameron Brisbane	<i>Anatomy of a failed municipality</i>	11/08/2021	Mail&Guardian
Staff Writer	<i>KwaZulu-Natal municipality has over 100 'ghost workers' receiving salaries</i>	28/02/2021	Business Tech
Thami Magubane	<i>Report reveals Msunduzi Municipality is still battling to stay afloat</i>	14/03/2022	The Mercury
Thami Magubane	<i>Msunduzi Municipality to remain under administration</i>	28/04/2022	The Mercury
Londiwe Xulu	<i>'Msunduzi's disconnection policy harsh, unfair'</i>	11/04/2022	The Witness
Chris Ndaliso	<i>No action against Msunduzi officials despite SIU reports on alleged security tender fraud</i>	02/03/2022	The Witness

5.4.1.8 **Anticipated Business Challenges If The State Of The PMB(CBD) Does Not Change**

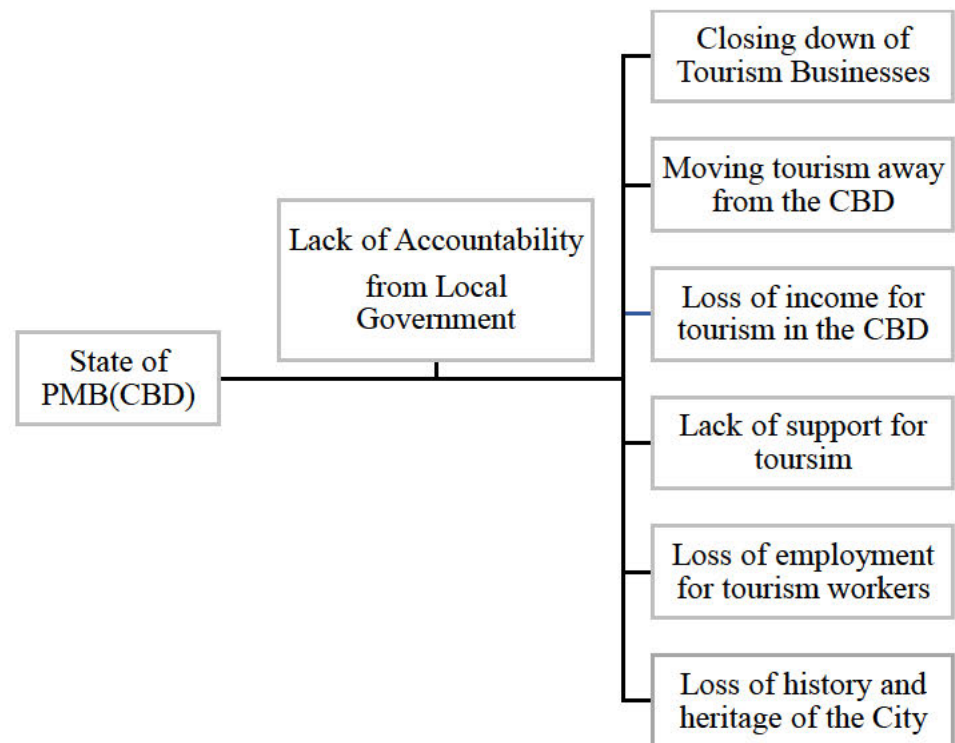


Figure 5.26 Anticipated challenges by the tourism business in PMB(CBD)

Tourism is as much responsibility of the government as much as it is for the tourism business owners. During the State of the Nation Address (SONA, 2022), the president insisted that infrastructure such as water, electricity, and broadband networks was paramount for the survival of tourism in the country, more especially after the effect of the Covid-19 pandemic.

Knowing the state of the Msunduzi municipality, the respondent's were asked what they believed would be some of the challenges they would face in business should the state of PMB(CBD) not change. The major challenge was that there would be continued lack of accountability in the local governance that is responsible for providing service delivery in the Municipality, and creating a conducive environment for the tourism business to thrive. The role of the local government was listed and discussed in subsection 5.4.1.5.

Respondents felt that if there is no accountability in government then the future of tourism in PMB is quite bleak. The challenges they are anticipating as shown in **Figure 5.26**, is that tourism businesses will be closing down because they cannot generate income and therefore cannot sustain themselves. That will cause loss of employment for people who have been working in tourism in the city, which will directly affect the livelihoods of the people of PMB. They also believed that preserved history and heritage in different sites in PMB will be lost because visitors will no longer be interested out of concern for their safety, and domestic visitors are not sensitized to the available attractions, therefore they are not interested. This also affects the economic growth of the city because people live from hand to mouth, and they would rather spend their disposable income in other cities instead.

One respondent said that she was not phased by the challenges as she could simply move her business to another area, like she has started with moving her visitors to Howick instead of tours within the CBD. She highlighted that she reroutes her visitors so that they never come to the CBD. Another respondent also said they are moving from where they are, and would be away from all the filth that they endure in the CBD. They made an example of Imperial Hotel which was built in 1878, and Macrorie House Museum (which was built in 1852, and was known as the best built house in the city, they had to close because they could no longer attract required visitors, both held so much history and heritage in PMB. Macrorie House is now office spaces for an NGO and Imperial Hotel is allegedly being converted into a students accommodation.

1st respondent: *"...The businesses that are within the city are suffering. The huge problem is loadshedding and water breaks. Businesses will definitely shut down or move from this filthy city. Infact we have also secured a new location away from this dirt. We will be moving as soon as our constration is done. We are very fortunate to have a director who is proactive when it comes to addressing our own issues, whether it's infrastructure or simple things like signage or marketing, our director makes sure he brings the money in for us to be able to do these. I can't imagine there many other tourist institutions or*

heritage institutions that will say fine, we'll go and print our own street sign and put it up..."

2nd respondent: "...Tourism is just plugging in many other problems that are faced by businesses and generally they do lip service but never really follow up on making tangible efforts to make these things change. So that's why I always say if everything else is ignored what makes us think tourism will ever get attention. Pietermaritzburg is laid back, the government personnel are cheque collectors whilst people do not have the buying power because of the nature of the city. Ask yourself why SAP and Coca Cola left PMB... they left with employment opportunities, PMB cannot attract investors, nevermind entrepreneurship. It is a sinking ship and no one wants to come here..."

3rd respondent: "...I will be diverting people from Pietermaritzburg and I'll take them to other areas. 95% of my clients are international people, so it's very simple. I just change the itinerary to be able to put them in another area. Because I can't afford to lose my clients..."

Respondents also felt if the local government is not supportive right now, they do not see any future support especially when it comes to services such as promotion of the city, marketing different tourism offerings and reviving tourism in the city. They felt it was each to their own. The government system was too flawed that they cannot even put up tourism signage, how much more of more expensive services. Cadre deployment is the death of an already flawed municipality. Chapter 3 of this study discusses this in context.

Henrick (2022) believes that businesses relocate due to issues with labor and the workforce, the need to reach more customers, the need to upgrade resources and facilities, the desire to reduce costs or improve income stream, and standards of living considerations. Certain problems are much more significant than others for various businesses. It is no surprise that tourism businesses are considering moving from the PMB(CBD).

5.4.1.9 The Strategic Vision for The Tourism Business Regarding Waste Accumulation

Every business has a vision and objectives in place to achieve their vision. The vision draws a bigger picture of what the organization aspire to achieve. Changes in the xternal environment will always have negative effects, but it is how a business respond to change that determines their longevity in business and achieving their vision (Henricks,2022). Change in the external environment means change in the internal and competitative environment. Implimentation of internal change can give new positioning for business, boost employee morale and better business perfomace (Livingsta,2020).

To address the question of waste accummulation in PMB(CBD) the respondents were asked what is their businesses' strategic vision to addressing the issue of waste accumulation from now on.

Figure 5.27 shows some of the ways in which respondents said they form part of their organizational strategies to address their external environmental issues especially waste accummulation in the PMB(CBD).

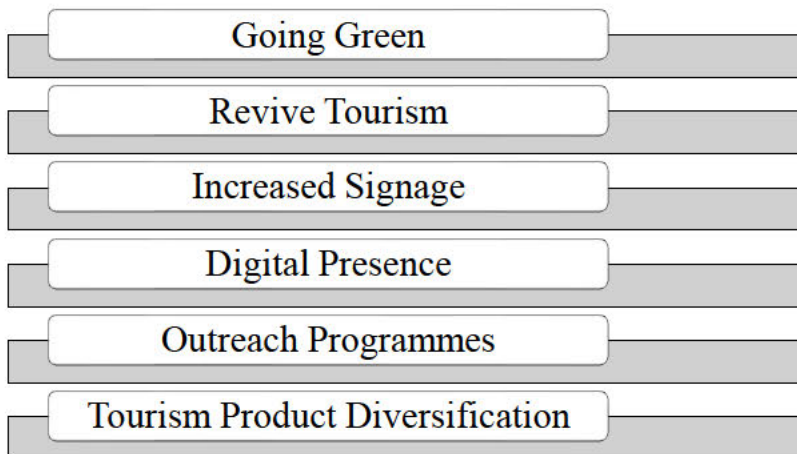


Figure 5.27: Vision for waste mitigation in tourism business in PMB(CBD)

Respondents said that going green has always been part of addressing the issues of waste in their businesses, and the state of the city drives the need for them to be ambassadors and drivers of change as this affects them the

most. They further said that they bear the maximum costs for going green and without proper support they rely on the business to keep up business expenses. So going green has always been the bigger vision, as this also adds to the issues of climate change.

Through community and schools outreach programmes they are able to educate people about ways to minimize waste and also be responsible when it comes to waste disposal. They believe the gap was lacking in the educational aspects, which amounts to people throwing waste anywhere they saw fit. Lack of law enforcement was also to blame for the amount of solid waste found in the CBD, they felt government should pass a rule that prosecutes people who do not refuse waste in appropriate bins. However, that was also arguable because with the municipality barely can provide essential services such as water, they would not have funds to hire security to guard the streets of PMB(CBD).

Respondents also had hope to revive tourism through capitalizing on the Events and Conferencing markets. PMB is known for most mega events in the province such as the Art In The Park, Duzi Canoe Marathon and the great Comrades Marathon. The respondents felt that even though these annual events happen in PMB they do not bring much tourism to the city because of lack of amenities, especially accommodation. They are hoping to revive tourism by offering visitors set tours during those events, and also developing products that will draw tourism in PMB.

To attract visitors, respondents said that their online presence was the ultimate goal as this was a cheaper option for the business and also drew engagements with customers. They hoped that extreme digital presence tangibilizes tourism offering, and could drive visitor numbers to their businesses. They mentioned social media presence as a game changer for driving traffic in the business pages and also attracting customers, old and new.

Signage is still a very complex issue in PMB, however, the respondents said their businesses will take it upon themselves to put up signage so that it's

easier for anyone to identify tourism areas, and also signage gives some respect to the industry. As much as they have lost hope in local government, they did mention that they would like to work with the municipality to ensure that it is not just an individual organizational effort to put up signage, but a collaborative effort. Some respondents also had this to say about their strategic vision:

1st respondent: *“...A community of tourism enterprises, can pledge all we need. The municipality have people with expertise who can design signs, even I can design. Then we put together money to do and put up signs. How many other marketing people do we have, who may be responsible for the promotion of PMB, we have skills but our individualistic approach is also drowning us. People can donate with their skills...”*

2nd respondent: *“...All we are looking for is waste is managed well and we have a clean and hygienic city that we can be proud of, and for our visitors so that we can showcase what we do have here. Tourism people are passionate by nature, they are very positive people. They want to make things happen. And so the turn around from the industry will be very good...”*

5.5 Conclusion

This chapter analysed and interpreted interview data which answered the study questions. The use of graphical, tables, pictures and Wordle method to present data themes and results was used to illustrate data set in an easy to read and understand way. The data themes were interpreted and respondents quoted for emphasis. The next chapter of this study will present conclusions and recommendations drawing from this study data analysis and interpretation chapter.

CHAPTER 6

FINDINGS, RECOMMENDATIONS, AND CONCLUSIONS

6.1 Introduction

A conclusion presents a picture of the thesis topic and gives an indication of whether the study aim was met or not (AShelp, 2017), it is a chapter that summarizes and analyses each chapter of the thesis. The conclusion of this study provides a succinct and extensive summary of the research study, as well as diverse perspectives on the significance of the findings as provided by (Biggam, 2011). To conclude this study, the researcher aligns the study and objectives with data findings. Thus, presenting study conclusions, recommendations, limitations, original contribution, and areas for future research.

6.2 Restatement of The Problem and Objectives Of The Study

This study's aim was to investigate the effect of municipal solid waste accumulation on tourism business in the city of Pietermaritzburg and forward recommendations for improved service delivery and solid waste minimization strategies.

The key research objectives were:

- To investigate the effect of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).
- To explore the solid waste management process in the tourism business in Pietermaritzburg CBD
- To explore how the negative destination image positioning of the Pietermaritzburg CBD is adversely affecting the tourism business.

6.3 Findings

The findings for this study are presented in alignment to the study objectives.

Objective 1

To investigate the impact of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).

Chapter 3 of this study reviewed secondary data on the impact of solid waste accumulation referencing previous studies and drawing to the PMB(CBD) as the study area. Waste is particularly described as an unavoidable challenge caused by civilization. Developing countries cannot keep up with waste demands as it needs high financial investments as well as space where landfilling is practical, waste handling is complex. This is significant in PMB(CBD) where there is lack of funds to even employ the right people to occupy key positions. Cadre deployment, corruption, service delivery, skills shortage, poor governance, and lack of accountability are some of the issues that immersed as far as solid waste accumulation and the state that the PMB(CBD) finds itself in is concerned.

Chapter 5 of this study found that due to the negative visitor positioning of the PMB(CBD) as a destination, the tourism business loses income, and bear costs of differentiating their products and service offering to suit customer needs, and alike customers choose substitute activities and destination other than coming to PMB.

The respondents mentioned visitor safety concerns as the major issue that is driving visitors away from the tourism business in PMB(CBD). These include health, vagrancy, crime, waste contamination, old decaying buildings, timber lifted buildings and exposed electrical cables. The lack of accountability from government by providing public services and infrastructure development also had a major effect on how the tourism business carry out its business, having to resort to outreach programmes as their major tourism product and services offering, and having one major

sustainable customer segment being schools, this included the issue of signage which impacts the tourism business. This has also contributed in some tourism businesses having to close, loss of employment for tourism employees, loss of income in the CBD, loss of history and heritage of the city (resulting from poor infrastructure maintenance), and businesses moving away. Butler's TALC model makes note of all these factors in a last stage of its life cycle, these are some of the things policy developers and businesses should note when assessing their destinations (see chapter 2).

Objective 2:

To explore the solid waste management process in the tourism business in Pietermaritzburg CBD

The study found that tourism businesses separate their own waste before it could be reused, recycled, or landfilled where necessary. The process includes bin categorization in the business. However, this is not true for PMB CBD municipal waste management unit process. There is misalignment in how Msunduzi waste handles its own waste compared to how the tourism business handles theirs. Chapter 3 of this study explored the legislative framework for waste management which furnishes numerous acts that are used by Msunduzi Waste on their Municipal Waste Management Strategy. As indicated in 3.5, waste management is a human right, where the environment should be conducive for human life, must not impact human health and sustainable development is paramount. This can be achieved through proper implementation of waste management where Section 33 of the constitution emphasizes lawfulness, rationality, procedural fairness, and accountability. The constitution is a cornerstone for policy making and where national government may be held accountable for provision of human and environmental services and lack thereof. The municipal bylaws do not cater to the current needs for sustainable tourism

development and that is evidenced from the MWMS (2014), where waste collection in tourism areas is treated the same as in domestic areas. It is the duty of the government to adhere to national frameworks for policy development and bespoke implementation where required.

Each local municipality develop their own bylaws as should be advised by town planners where they have a vital role of assisting municipalities with infrastructure planning and development. Lack of synergy in municipal development, leaves gap for improper planning and implementation for sustainable develop as in the case of Msunduzi Waste. Provision for Tourism is not included in the (MWMS,2014) and neither the municipal IDP (2021). NEMWA Act also furnishes the policy for appointing people and that is not particularly adhered to in the MWMS where there are numerous vacant posts in key positions.

This study also finds that the local government's lack of provision for core services such as waste management whilst claiming to lack funds is due to fraud and corruption within governmental employees, and the PFMA must be adopted to hold those found guilty accountable. Maladministration has been particularly prevalent in Msunduzi Municipality where it has been under administration from 2018. Batho Pele provides principles for public services provision and the first people to be considered are the recipients of these services. Accountability and value for money are amongst the principles where tourism service providers should be taken into consideration when the MWMS is developed and implemented.

Chapter 3 of this study furnishes the three goals/objectives for municipal solid waste, namely:

- a) *Promote recycling and recovery of waste.*
- b) *Ensure the effective and efficient delivery of waste services.*
- c) *Ensure that legislative tools are developed to deliver on the Waste Act and other applicable legislation.*

The municipal solid waste strategy goals aim to reduce the amount of waste that goes into landfill by 10%, by prioritizing recycling. The municipality also hope to create waste buy-back centres known as Material Recovery Facilities, where existing materials such as garden waste would be converted for re-sale. The strategy also aims to increase door-to-door waste collection, which is contrary to their waste collection plan. The ineffectiveness of waste management and poor service delivery in PMB(CBD) is explicitly reviewed in Chapter 3 of this study, which contrasts goal 2 of the MSWS. The Waste Business Unit in Msunduzi also record the amounts of waste on the SAWIS in alignment with the Waste Act, which the municipality is currently understaffed, and they can only compile the numbers with the help of an intern. Butler's Tourism Area Life Cycle (TALC) alludes to PMB(CBD) bearing all traits of a destination in its decline stage in the life cycle.

In chapter 3 of this study, the MSWS adopts the waste management hierarchy as a framework recommended in the National Waste Management Strategy (NWMS), ensuring legislative alignment as appears in goals 3 of the strategy. The goals are however devoid to waste prevention as the highest order of waste management as it appears on the waste management hierarchy. These goals have no provision for tourism and are not taking into cognisance the number of socio-economic benefits that tourism businesses have, and how it contributes to solid waste management and waste accumulated in the CBD. Tourism may not be developed as a lone industry and needs all other governmental entities to make the environment conducive for tourism to thrive.

Objective 3

To explore how the negative destination image positioning of the Pietermaritzburg CBD is adversely affecting the tourism business.

The study finds that Pietermaritzburg is negatively perceived by tourists and even locals. The respondents highlight the factors that cause tourism

to be negatively perceived and the amount of solid waste accumulated on the streets of the CBD being the main determinant on how tourists negatively perceive Pietermaritzburg. Visitor concerns discussed in chapter 5 of this study emancipate from the issue of solid waste accumulation, and the overall ambience of the CBD.

The presence of solid waste is a risk to human health, vagrants digging into waste bins contributes to piles of waste found in the street pavements, where tourists should be walking in. Crime is a major issue in Pietermaritzburg, where in places which most waste, there is a likelihood that vagrants can rob you and no one will be of assistance, regardless, PMB is a crime capital of the province of KwaZulu-Natal which also discourages tourists to visit this destination. Tourism business find themselves in a position where they need to diversify their offering and remain active in a tourism value chain. They bear the costs of going green, putting up own signage for direction to visitors, doing out-reach programmes, maximising on their digital presence to retain their customer segments and to attract new ones, and further emphasis the value they offer to their customers.

Chapter 3 denotes that improper expenditure within the Waste Business Unit affects operation in the destination, therefore a budget to meet the solid waste accumulation demands is impractical. This affects the positioning and anticipation of tourism in Pietermaritzburg as a tourist destination because the overall aesthetics and environment are unpleasant to tourists.

6.4 Recommendations

This study's finding has petitioned for the following recommendations:

- This study recommends that NWMS should include for the provision of tourism business, this can be enacted by the provincial government and implemented in IWMS by local municipal government. Waste management bylaws must cater to tourism business needs to boost socio-

economic benefits of PMB(CBD). Tourism should be everyone's business regardless of whether one directly benefits from it or not, especially local government.

- Tourism areas waste collection plans should be treated differently from domestic areas due to the influx of activities that happen in tourism areas. This would assist in ensuring that the aesthetics of the tourism areas is welcoming and aesthetically pleasing. Also, this will rid the visitor safety concerns highlighted on the findings above.
- The local government should revisit its roles in the tourism white paper and account for all its responsibilities to the tourism business. This will remind the government that tourism cannot be developed alone but needs all public services to yield optimum results and socio-economic benefits. This includes but not limited to providing signage, fixing roads, maintenance of sites and provision of proper water, electricity, and sanitation.
- The local government must employ qualified people who occupy key positions because cadre deployment is the downfall of many municipalities. This should be considered when the vacant posts on the ISWMS are advertised. This will also decrease the amount of improper expenditure, fraud, and corruption, where the public funds will be prioritised for betterment of public service delivery needs.
- Promotion and marketing for tourism business should also be provided by the tourism unit in the Msunduzi Municipality because the business bears major costs of advertisement, marketing, and promotion. The government has a responsibility to have its own destination marketing plan in place, to promote local tourism attractions and activities.
- The local government should also increase security visibility in tourism areas so that visitors and residents can be protected from crime. Property owners should be urged to refurbish their decaying and timber lifted businesses to cater for visitor safety and tourism business' socio-economic benefits.

- Where waste prevention is not practical, separation at source should be used to decrease the amount of waste that goes into landfilling, this will achieve the first goal of the MSWMS.
- Tourism practitioners should take an initiative to be part of the IDP planning meetings and contribute on their grievances so that tourism does not appear as though it is a lone industry.
- Major business player such as banks, supermarkets and hospitals should donate bins because a lot of people go to the CBD to access their services as well. This would reduce the amount of solid waste accumulated on the streets and pavements of PMB(CBD).
- Tourism businesses should charge suitable entrance fees to their establishment and must diversify product offerings to suit different market segments, this could be done especially through tour guiding and interpretation on site. Making use of social media and constantly updating their websites by using metatags could boost visitor conversions in the businesses.
- The use of virtual and augmented reality by the tourism business to entice tourist to come to the attractions could help in reviving tourism in the area. They could reach international markets (where these are already broadly used).
- The tourism business can also host live online tours and charge a fee to the customers. Customers would experience the tour of their desired attractions at the comfort of their home and not have to worry about risks associated with the Pietermaritzburg CBD. This experience would be set up as “Metaverse”, where technology meets the real world in real time.
- The government working together with the tourism business could use Figure 6.1 model for improved service delivery.

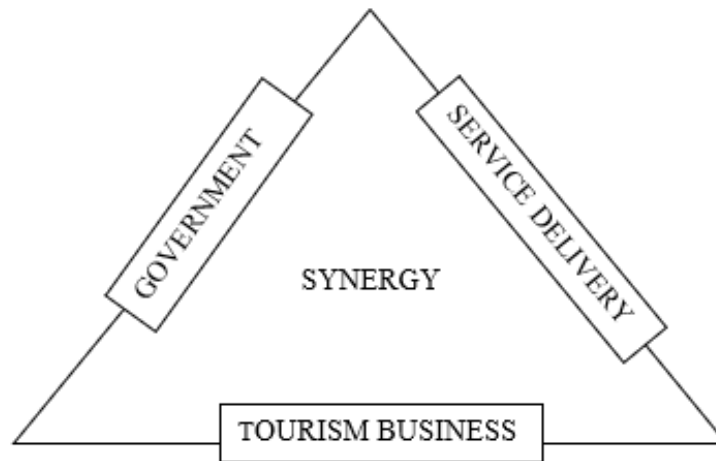


Figure 6.1: Tourism business and government service delivery model

Source: Author's own

Tourism business and service delivery: Tourism industry is highly dependent on service excellence to attract and retain customers. The services their deliver to customers calls for repeat business. Whilst it is of paramount to have excellent customer service in tourism, likewise service delivery creates a conducive environment for tourism businesses to thrive.

Proper infrastructure, land use planning, waste collection and destination marketing would create an environment that is enabling for tourism service excellence.

Tourism business and government: Government should develop policies that are enabling for the tourism business to thrive. This can be achieved through allowing tourism stakeholders to participate in policy development as this affects them the most. Different departments in government should include tourism business experts when developing their KPIs and strategies, to create cohesiveness and collaborative efforts in tourism industry's sustainable development. The tourism business should actively participate in the development of governmental policies by delegating tourism experts to be involved in the development of KPIs, strategies and bylaws that would affect tourism.

Service delivery and government: It is the government's responsibility to provide public services to the people and businesses, such as electricity, water and sanitation, road infrastructure, waste management and signage. Therefore, to create an environment that is conducive to support human life and sustainable businesses, the government should allocate sufficient funds to provide these services.

All this can be achieved through synergy, a collaborative effort between government, people, and the tourism business.

6.5 Contributions of The Study

According to Thompson (2015), the study's originality is having the uniqueness and present a fresh idea. Waste management's legislative mandate stipulate the roles of government in the provisioning of waste management services. Literature petitions the study with evidence of allegations of corruption and fraud, maladministration, and skills shortage as the main contributors in the lack of government in providing proper waste management services. No study has previously been conducted that investigated the effects of solid waste accumulation on tourism in Pietermaritzburg (CBD). The original contribution of this study lies in the recommendations that tourism businesses and government should work together in creating an environment where service delivery and standards are prioritised, accountability adhered to in all spheres. Service delivery bears value or business costs for not only the tourism industry, but also major socio-economic benefits that could benefit locals. Secondly, the tourism business and government service delivery model (figure 6.1), gives an interrelatedness of the importance of working together to achieve not only business goals but also the constitutional rights as it appears on Section 36 of the constitution. Tourism cannot be developed as a lone industry; it is everyone's responsibility to ensure they participate in waste minimization and prevention where possible, through educational programmes and active conscious mind to assist in restoration of PMB's image. Thirdly, the study identified the gap in literature that addresses the issue of waste management in its totality and its effect on the businesses in tourism, which has never been

tapped into previously. The study further conceptualized the issue of solid waste management in a model as furnished in Chapter 2 to guide literature review and concepts for this study. This can be used or critiqued by other researchers as a framework for their own studies in a similar field or context.

6.6 Limitations of The Study

The research study design was qualitative, and sample purposively selected which do not generalise findings based on the population; therefore, the study results are not generalised. The qualitative study designs give context of human experience of a particular case (Beck,2010). The sample of was only limited to 14 respondents, with 2 whose organization closed in 2021 and two were not willing to participate, which resulted in the study sample remaining at 10 study respondents who were interviewed. Purposive sampling was chosen because it was precise and easily available to meet all the study's pertinent needs, as indicated by (Welman, 2005). It was important for this study findings in Chapter 5 to understand the presented finding are based on the limited 10 respondents. Microsoft Teams was used for data collection which also hindered that personal feel of interviews and limited the researcher in taking pictures that would be relevant to this study from each visited tourism business. Lastly, due to the untimely events and demands in tourism, the researcher had to change data collection schedules to suit the next available appointments for respondents where some were interviewed past their working hours.

6.8 Areas for Future Research

- To determine the stakeholders in waste management strategy development and the intergradation of the strategies to meet tourism demands.
- To assess the Pietermaritzburg's unique selling point that could retain customers and the government's role in ensuring maintenance of infrastructure.
- To determine Pietermaritzburg's visitor needs and assess how bylaws can be adapted to suit these needs and maximize on tourism benefits.

6.7 Conclusion

These study findings confirm that there is a solid waste accumulation problem, and it affected the tourism business in PMB(CBD). This chapter presents these findings and recommendations to help tourism businesses and government to deliver excellent services to the people. It further gives an original contribution of the study, whilst acknowledging study limitations. The areas for future research are presented in alignment to what this study could not cover, but there is however a need for scholars to research these areas.

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11 February 2022

Ms S B Nzimande
831009 Hansa Road
Machibisa Location
Pietermaritzburg
3201

Dear Ms Nzimande

The Effect of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg.
Ethical Clearance number IREC 243/21

The Institutional Research Ethics Committee acknowledges receipt of your stakeholder permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events (serious or minor) which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely

Dr K Padaratchi
Deputy Chairperson: IREC

ANNEXURE A: IREC full approval



LETTER OF INFORMATION

Title of the Research Study : The Effect of Solid Waste Accumulation on Tourism Business In the Central Business District (CBD) of Pietermaritzburg.

Principal Investigator/s/researcher: Ms Sindisiwe Ndumbe (BTech: Tourism Management, NDip: Ecotourism Management)

Co-Investigator/s/supervisor/s: Not Applicable

Brief Introduction and Purpose of the Study: Pietermaritzburg has been battling the high solid waste accumulation for the past years and local newspapers such as The Witness, Maritzburg Echo and Echo have been reporting these grievances. The purpose of this study is to investigate the effects of municipal solid waste management on tourism businesses in the city of Pietermaritzburg and provide recommendations for improved service delivery.

Greeting: Dear Sir/Madam

Introduce yourself to the participant: I am a 2nd year Masters student at DUT doing research for my Master Management Sciences Degree in Hospitality and Tourism/Environmental Management.

Invitation to the potential participant: I would like to invite you to participate in the research study, your participation is voluntary.

What is Research: Research is a systematic search or enquiry for generalized new knowledge.

Outline of the Procedures:

Introduction

Tourism businesses are open systems which means that they are susceptible to their environment. They are largely affected by the external environment, economic, social, political and law, technological and natural (Jones & George, 2020). Municipal Solid Waste (MSW) management is also influenced by educational, legislation, historic influences, social norms and concerns, natural environmental concerns, economic factors, institutional factors, legislation, and political contexts (Naidoo, 2009). Therefore, for tourism to thrive it is dependent on the municipality for service delivery and keeping the city clean as the tourism destination itself. Sanitary cleaning of cities and different settlements from municipal waste and its removal remains an unresolved environmental issue in Ukraine (Murava and Korobelnikova, 2016) and South Africa is no exception. According to McTarrant (2019),

06 August 2020

ANNEXURE B: Letter of Information

South Africa is in a waste crisis that requires quick consideration and attention. South Africans produce about 54, 2 million tons of general (city, business, and industrial) waste every year. Of this 54, 2 million of tons of waste, a limit of just 10% is reused or recycled for different utilizations, while in any event 90% is landfilled or dumped. Municipal waste cannot be categorized as the largest in volume in South Africa, with industrial and mining waste being the largest. It is however important because it has major impacts on daily lives and illecebile for public financing. (IDP,2015).

Aim of this study

This study aims to investigate the effect of municipal solid waste accumulation on tourism business in the city of Pietermaritzburg and forward recommendations for improved service delivery and solid waste minimization strategies.

Research Objectives

The objectives of this study were critical because they described what the researcher hoped to accomplish through the study and addressed the most significant components of the research challenge. Bischoff and Rüdler (2011) used the research objectives to weave the investigation together, give it purpose and coherence, and create a framework for the final report.

Objective 1

To determine the solid waste management policy guidelines.

Objective 2

To identify existing objectives of the municipal solid waste strategy.

Objective 3

To investigate the impact of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).

Objective 4

To forward recommendations based on the outcomes regarding the effect of solid waste accumulation towards the tourism business.

As a participant you are respectively selected by the businesses you are working for, and your sole responsibility is to answer the questions posed by the researcher. The individual interviews will be carried out in the Microsoft Teams/Zoom applications and interviews recorded for transcription, taking into consideration Covid-19 protocols, and also ensuring confidentiality of participants. The interview will be 35 minutes. As a participant you will have a minimum of 30 minutes to answer questions and an additional 5 minutes for debriefing questions. Participants are expected to give clear and discreet information. You may ask clarifying questions where it may be unclear.

Risks or Discomforts to the Participant: This study poses no risks to you especially since there will be virtual interviews. There will be no form of physical contact which may subject you to risks of contracting Covid 19.

06 August 2020

Explain to the participant the reasons he/she may be withdraw from the Study: You may be withdrawn when the saturation point is reached as per the researchers' observation, and or when you ask permission to be excused or excluded from the sample. You may send a formal email stating you are terminating your participation. You may terminate your participation at any given point, and the researcher will allow that.

Benefits: No benefit will be incurred; participation is strictly voluntary.

Remuneration: There will be no kind of remuneration for this study. Participation is strictly voluntary.

Costs of the Study: You will not be subjected to any costs of the study. The researcher will cover all costs of this study, including data that will be used during interviews. You are requested to state the amount of data/GB you use so that the researcher can buy that data for you.

Confidentiality: This study proves confidentiality and anonymity by requiring you to sign consent letters before the beginning of the interviews, and by which you have a legal right to participate in and/or withdraw from the investigation. Throughout the interviews, the researcher receives an informed written permission letter from interested respondents. As a result, all respondents to this investigation will be kept anonymous. The researcher assures respondents that the information shared would be kept private between the study supervisor and the researcher prior to, during, and after the investigation. In order to maintain confidentiality, the researcher chose to describe respondents using specific codes rather than names or other identifiers. You are advised that all the information will provide would be kept for five years before being discarded.

Results: The results will be shared through publications and book chapter contributions. Any significant new findings will be shared directly to the organization and participant by email as a form of communication tool.

Research-related Injury: There is no anticipated injury to you during the course of this study, as interviews will be done virtually to avoid any form of danger which may be posed to you.

Storage of all electronic and hard copies including tape recordings: Interview recordings and consent forms will be downloaded and stored on Google Drive, which only the researcher has access to with her credentials (Password protected) . The data will be stored on Google Drive for 5 years as per the institutional rules and will be discarded after. It will be discarded by deleting all recordings and files on the drive and permanently deleted from the deleted items so that it cannot be recovered. During Data Analysis, the researcher will do her own data analysis, which ensures confidentiality.

Persons to contact in the Event of Any Problems or Queries Please contact: the researcher (Sindiwe Ntshande- 0659954079 –sindiwanntshande94@gmail.com), or supervisor (Dr Chit-Ntshwazikhonac@dut.ac.za- 0338458810) or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L. Linzielo on 031 373 2577 or researchdirector@dut.ac.za.

06 August 2020



CONSENT

Statement of Agreement to Participate in the Research Study:

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

Full Name of Participant
Thumbprint

Date

Time

Signature / Right

I, Sindiswa Benedita Nzimande herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Full Name of Researcher

Date

Signature

Full Name of Witness (If applicable)

Date

Signature

Full Name of Legal Guardian (If applicable) Date

Signature

06 August 2020

ANNEXURE C: Consent Form

Re : Miss Sindisiwe Ndumande
Date : 06 May 2020
E-mail : sindisiwe.ndumande94@gmail.com

African Link
267 Burger Street
Pietermaritzburg
3201

Dear Mr Hussein,

Subject: Request for Permission to Conduct Research Study Within Your Organization.

I am a registered Master of Tourism, Hospitality and Environmental Management student attending at the Durban University of Technology- Riverside Campus. I am required to complete a dissertation and seek to make contributions on service delivery improvement about Municipal Solid Waste contamination in the city of Pietermaritzburg.

My research topic reads: "The Effects of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg". The study will be conducted under supervision of the Durban University of Technology. The objectives of the study are:

- a) To determine the solid waste management policy guidelines.
- b) To identify existing objectives of the municipal solid waste strategy.
- c) To investigate the impact of solid waste accumulation on tourism business in Pietermaritzburg Central Business District (CBD).
- d) To forward recommendations based on the outcomes regarding the effect of solid waste accumulation towards the tourism business.

I intend to interview 2 key informants, which will be any non- managerial employees and executive personnel. Interviews will be conducted with persons mentioned here above. Please see Letter of Information regarding the study. Furthermore, the final dissertation will be available at the institution and online after final submission.

Your co-operation in this regard will be highly appreciated.

Yours Sincerely

Miss Sindisiwe Ndumande

Support of Dissertation Supervisor

This is to confirm that I fully support the request made by Miss Ndumande and trust that you will enable us to allow DUT to contribute to ways of improving service delivery for our citizens and enhance tourism by giving Miss Ndumande permission to conduct the study.

Dr N S Chili

PhD(UKZN); MRT(UKZN); STD (UKZN); PGDTE (UNISA).

ANNEXURE D: Request of permission to conduct study.

22 March 2022

TO WHO IT MAY CONCERN

Re: Sindisiwe Nzimande (21449833) – Master of Management Sciences.

Topic: The Effects of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg.

The South African National Biodiversity Institute, KZN National Botanical Garden Cost Centre grants Ms Nzimande permission to collect data from the organisation towards her research project. Any other requirements relating to this project will directed to Mr M. Zondi.

We are excited to be part of this study being undertaken by Ms Nzimande, and we request acknowledgement of our participation.

We wish her all the best with her study.

Kind regards

Mr Zondi

Branch Stamp:

**KWAZULU NATAL NATIONAL BOTANICAL
GARDEN**
P.O. BOX 21687
MAYORS WALK, 3208
TEL.: 033 344 3585

ANNEXURE E: SANBI: KZN Botanical Gardens gatekeepers' letter



Email: bennie@afrikanlink.co.za

Tel: +27 210 450 175

Fax: +27 210 450 172

Cell: +27 82 512 2428

Website: www.afrikanlink.co.za

21 January 2022

TO WHO IT MAY CONCERN

Re: Sindisiwe Nzimande (21449833) – Master of Management Sciences

African Link grants Ms Nzimande permission to collect data towards her thesis. Due to the nature of the business, the liason person at African Link will be Mrs Maharaj Singh and if there is need to have direct contact with other staff, this will be arranged by her and conducted per appointment.

Topic: The Effects of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg.

We are delighted to be part of this journey being undertaken by Ms Nzimande , and request a copy of the completed thesis acknowledging our participation.

We wish her all the best with her studies.
Kind regards

G Bhoola
Director

ANNEXURE F: African Link gate keepers' letter

24 January 2022

TO WHO IT MAY CONCERN

Re: Sindisiwe Nzimande (21448833) – Master of Management Sciences

The KZN Museum grants Ms Sindisiwe Nzimande permission to collect data at the KZN Museum towards her thesis.

Topic: The Effects of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg.

We are very happy to cooperate and provide Ms Nzimande with all that she requires. We request a copy of the completed thesis if possible.

We wish her all the best with her studies.

Thank you

Kind regards

Viranna Frank (Mrs)
Chief: Public Relations and Marketing

ANNEXURE G: KwaZulu-Natal Museum gatekeepers' letter

24 January 2022

TO WHOM IT MAY CONCERN

Re: Sindiswe Nzimande [21449833] – Master of Management Sciences

In response to Ms Nzimande's email request dated 21 January 2022, I confirm that Ms Nzimande may proceed with the collection of information at uMsunduzi Museum pertaining to the topic of the thesis: *"The Effects of Solid Waste Accumulation on Tourism Business in the Central Business District (CBD) of Pietermaritzburg."*

Kindly note that it is a requirement that all protocols pertaining to Covid 19 are applied while undertaking the assignment at uMsunduzi Museum, including the wearing of masks, social distancing, and sanitizing.

We look forward to engaging with Ms Nzimande and request that the Museum be provided with a free copy of the completed thesis.

We wish her all the best with her studies.

Thank you

Kind regards

Mr R Luyt
Deputy Director: Core Functions

ANNEXURE H: UMsunduzi Museum gatekeepers' letter



Enquiries: Bryony Clark

Date: 25 January 2022

TO WHO IT MAY CONCERN

Re: Sindisiwe Nzimande (21449833) – Master of Management Sciences

The Tatham Art Gallery grants Ms Nzimande permission to collect data at the Tatham Art Gallery for research purposes for her thesis.

Topic: The Effects of Solid Waste Accumulation on Tourism Businesses in the Central Business District (CBD) of Pietermaritzburg.

We are very happy to cooperate and provide Ms Nzimande with all that she requires.

We wish her all the best with her studies.

Thank you
Kind regards

Bryony Clark
(Acting) Manager

Tatham Art Gallery
Chief Albert Luthuli Street, Opposite City Hall, Pietermaritzburg
033 3628835
P.O.Box 321 Pietermaritzburg 3200
Email: bryony.clark@resound.co.za
Web: www.tatham.co.za

ANNEXURE I: Tatham Art Gallery gatekeepers' letter

INTERVIEW SCHEDULE	
Construct	Open Ended Question
1. Introduction	<p>a) What is your name, surname, age and what work do you do for this organization?</p> <p>b) Can you please tell me more about your job and experience working for this organization?</p>
2. Waste Contamination and its effect on the tourism organization.	<p>a) How have you managed to keep your organization clean and solid waste free? Can you please take me through the whole process?</p> <p>b) How have you established that your solid waste management system is effective?</p> <p>c) May you please comment on the image of the City and how does it affects your business?</p> <p>d) How often does the Municipal Solid Waste (MSW) collect waste and do you think it effective for fluidity of tourism?</p> <p>e) How have your visitor numbers and annual turnover been affected by the positioning of the city?</p> <p>f) How do you think customer retention and repeat visits have sustained your business regardless of the state of the city?</p> <p>g) How do you think your organization has adapted and been proactive to address external environmental factors, such as; social, natural, political and law, economic and technological?</p> <p>h) How do you think the stage the city is going to affect the business going forth?</p> <p>i) Where do you think the strategic vision of the organization is heading to from here, regarding the waste accumulation levels?</p>
3. Conclusion	<p>a) How do you think the organization will best utilize the research results for the benefit of the business?</p> <p>c) Any recommendations regarding this study, to perhaps the municipality, other tourism business and stakeholders?</p>

ANNEXURE J: Interview Schedule

Thesis Chapter 1-6

ORIGINALITY REPORT

11 %	7 %	7 %	6 %
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	repository.nwu.ac.za Internet Source	1 %
2	Submitted to University of Hull Student Paper	1 %
3	docplayer.net Internet Source	<1 %
4	researchspace.ukzn.ac.za Internet Source	<1 %
5	uir.unisa.ac.za Internet Source	<1 %
6	www.enviroleg.co.za Internet Source	<1 %
7	Submitted to Midlands State University Student Paper	<1 %
8	Submitted to Durban University of Technology Student Paper	<1 %
9	Submitted to Segi University College Student Paper	<1 %

ANNEXURE K: Turnitin Report



EDITOR'S CERTIFICATE

7 September 2022

Re: LANGUAGE EDITING STATEMENT

I, THE UNDERSIGNED, hereby confirm that I have edited a THESIS titled ***THE EFFECT OF SOLID WASTE ACCUMULATION ON TOURISM BUSINESS IN THE CENTRAL BUSINESS DISTRICT (CBD) OF PIETERMARITZBURG***, by Sindisiwe B. Nzimande.



Hatikanganwi Mapudzi
Associate Member

Membership number: MAP002
Membership year: March 2022 to February 2023

071 585 1512
floedting@yahoo.com

www.editors.org.za



Postgrad Certificate (Higher Education); PhD (Communication);
M.A (Journalism & Media Studies); Postgrad Dip (Media
Management); B. Soc Scie (Hons, Communication); B. Applied
Comm Management.

Senior Lecturer; Chartered Public Relations Practitioner; Freelance Editor; Research Consultant

ANNEXURE L: Editors Certificate