STAKEHOLDER MANAGEMENT IN CONSTRUCTION PROJECTS IN THE WESTERN CAPE, SOUTH AFRICA

By

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DECLARATION

I, Siyoni Jacisa, declare that the contents of this thesis represent my own unaided work, and that the dissertation has not been submitted before for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

2022.09.27

_____ _____

Signed **Date**

ABSTRACT

There are many different stakeholders in the Western Cape construction industry. The identification and management of these project stakeholders, who constitute a significant source of unpredictability in construction projects, is one of the key issues that is emerging in the management of construction projects. Only when the capable managers take into account the possible influence of the project's stakeholders can successful construction project management be achieved. The aim of this study was to improve stakeholders' position in construction projects in the Western Cape. In order to achieve this aim, the following three objectives were established: to identify the diverse stakeholders and their interests in construction projects; to rank stakeholders according to their impact on construction projects; and to identify the most important factors in the construction project affecting the stakeholder management process. Stakeholder management was the subject of the literature review. Interviews were conducted with construction industry professionals and a questionnaire survey was distributed amongst them. A project management organization in the construction sector received 100 questionnaires. 86 questionnaires were acknowledged with an 86% response rate.

The primary factors affecting the stakeholder management process include: choosing a project manager with extensive experience; openly evaluating alternative solutions; ensuring effective stakeholder communication; establishing a shared goal and objective for the project; and assessing stakeholder needs and expectations. The client, end user, subcontractors, community, and regulators are the primary key stakeholders in the Western Cape construction project. A management structure has been created to direct stakeholder participation in construction projects.

This study's key recommendation is that the project management should make use of the stakeholder management processes and approaches when dealing with stakeholders. In order to choose the right stakeholders for the right level of engagement and lower the likelihood of mistakes that can result in improper management of construction stakeholders, a project manager should modify the stakeholder assessment approach used in this study for the identification, categorization, and ranking of stakeholders.

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DEDICATION

This dissertation is dedicated to:

May God have pity on the soul of my late step father (Khululekile Bengo);

Thank you for your unending support, Fundiswa Qolintaba, my mum;

I want to express my gratitude to my partner, Nosibusiso Magingxa, for her unwavering support;

To serve as an inspiration to my children, Lulibo and Minoli ;

I appreciate the consistent support from my family, friends, and workplace.

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GLOSSARY

Acronyms/Abbreviations	Definition/ Explanation
PMBOK	Project Management Body of Knowledge
CPUT	Cape Peninsula University of Technology
SPSS	IBM Statistical Package for Social Science
CSFs	Critical Success Factors
PMI	Project Management Institute
HDC	Higher Degrees Committee

CHAPTER ONE
INTRODUCTION AND BACKGROUND

1.1 Introduction

The process known as "stakeholder management" is used in construction projects to plan, keep track of, and improve relationships amongst stakeholders (Yang & Shen, 2015). It requires methodically identifying stakeholders, analysing their requirements and preferences, and designing and carrying out various engagement strategies. An effective stakeholder management strategy involves how to organize interactions and evaluate the calibre and status of relationships with diverse stakeholders. (Yang & Shen, 2015).

According to Srinivasan and Dhivya (2020), construction projects are typically bigger and more complicated by nature. Usually, they are divided into a number of tasks or actions that are completed by several individuals or groups, each of whom may have variable degrees of interest in and/or involvement in the project. Collinge (2012) posits that different stakeholders have different forms of project interests and contribute at different levels. Nowadays every project is carried out in a process where stakeholders perform an important part in completing a project.

Hammad (2013) asserts that construction projects include internal and external stakeholders, just like other endeavours. A construction project's list of businesses participating includes facility managers, project managers, designers, subcontractors, shareholders, project team members, including foremen, suppliers, competitors, banks, regulatory authorities, insurance companies, government bodies, community members, the public, and clients.

Having stated that, the major aim of this dissertation was to determine the level of appreciation for stakeholder management techniques and the best guiding principles that are suitable for construction projects headquartered in the Western Cape. In order to do this, surveys and interviews with businesses conducting construction projects in the Western Cape were conducted. The statistical SPSS software version 26 was used in analysing data hence descriptive analysis was employed in this study.

1.2 Problem statement and background

The importance of stakeholder management has not yet been realized, even though it has long been known to increase the likelihood of successfully completing the project. Hammad (2013) postulates that the construction industry is diverse by its origin. Disagreement amongst project stakeholders begins during the execution phase, negatively impacting the management team's ability to finish the construction project on schedule, within the expected spending limit and quality standards. These disagreements are caused, among other things, by a lack of coordination and management among the numerous stakeholders involved in a project.

According to Solanke (2015), it cannot be stressed that construction projects in Cape Town have not fully understood the need for managing project stakeholders. Solanke (2015) suggests that management in construction projects focuses more primarily on project constraints, which are the schedule, quality, and cost of the project. Other constraints include: alienating internal and external stakeholders, including those who are part of the project team and the human resources department as well as subcontractors, the community, the government, and the legislature. According to Hammad (2013), the construction industry has had a dismal track record for stakeholder management.

According to Molwus (2014), stakeholder management methods may be inconsistent if there is no precise structure guiding the stages for construction process and a clear agreement on who must be responsible for stakeholder management. This suggests that there is a lack of understanding of the relationship between key success factors for stakeholder management in construction projects and its significance. It is necessary to investigate and assess the needs and goals of stakeholders as well as the implications of these and to provide a framework for controlling process stakeholders. This will ensure that the industry has a solid structure for stakeholder management in construction projects, enabling it to fully reap its rewards.

1.3 Aim and objectives of the study

This thesis aims to provide a stakeholder management framework that integrates and connects the various project life cycle stages for construction projects with complex stakeholder challenges (projects with multiple and diverse stakeholders and interests). The study's objectives are stated as follows:

1.3.1 Research objectives

- To identify the diverse stakeholders and their interests in construction projects.
- To rank stakeholders according to their impact in construction projects.
- To identify the most important factors in the construction project affecting the process of stakeholder management.

1.3.2 Research questions

- What are the typical stakeholders found in construction projects?
- Who are the most important stakeholders based on their impact on the project?
- What are the factors affecting the stakeholder management process in construction projects?

1.4 Research design and methodology

The main objective of this section is to detail the population, sampling, and data collection processes employed in this thesis's study methodology.

1.4.1 Research design

According to Kothari (2004:31), research design is a helpful tool for obtaining answers to research questions. Mouton (2006:107), asserts that the term "research design" refers to a convention of guidelines or instructions that outline the procedures and methods for gathering and interpreting data. Brynard and Hanekom (2006:36) assert that using a research design will help you conduct impartial, truth-compliant planning, structuring, and execution of your research. Both researchers emphasize that a research methodology ascertains the kinds of research procedures that are useful in any given study. This enables the researcher to select the techniques for data collection and analysis. Both descriptive and exploratory research design were employed by the researcher for the benefit on this study. According to Nykiel (2007:56), descriptive design allows for the generalization of sample results, which is critical for validity and reliability. Sürücü & Maslakçi (2020: 15) refer to validity as "how well the experiment measures what it claims to measure, whereas reliability refers to the stability or consistency of the experiment’s outcome". Babbie and Mouton (2010:80) are of the opinion that, exploratory research design aids the researcher to have a better understanding of a subject.

1.4.2 Research method

A research strategy is how to approach study goals. There are two sorts of research methods: quantitative and qualitative analysis (Westmarland, 2011). Babbie and Mouton (2010:263) assert that qualitative approaches seek to understand people's experiences of the "world" as individuals and communities, in contrast to quantitative approaches, which aim to make sense of people's observations of the "world" as individuals and populations. In order to understand the factors influencing stakeholder management in construction projects and to investigate stakeholder management's regional practices in the Western Cape, this study combined quantitative and qualitative methods, including surveys and interviews as research tools for the subject under investigation.

1.4.3 Population understudy

Weeks (2020) defines a population as a study of a collection of clearly identifiable people or objects taken from the general population who share a certain trait or feature. The researcher targeted a major construction project company located in the Cape Town Metropolitan Municipality. The researcher's population comprised of construction project businesses, project managers, team managers, subcontractors, professional engineers, and foremen of construction projects. As a result, one large construction company in the Cape Town Metro Municipality Area was selected.

1.4.4 Sample frame

Bryman (2004:87) suggest that targeting the whole population of a study is difficult, time-consuming, and costly. The author recommends the use of a sample frame, therefore a sampling frame was used in this study. A sampling frame is the source material or device from which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions. Those employed on permanent contracts in construction projects in the Western Cape made up the sample frame for this study.

1.4.5 Sampling method.

The two primary types of sampling techniques are probability sampling and non-probability sampling (Adler & Clark, 2010). The study engaged a purposive sampling method. Adler and Clark (2010:123) claims that in purposive sampling, the researcher makes the final decision on the research objects. The researcher chose the

respondents for this study based on their characteristics, histories, attitudes, experience and perspectives, as well as their significant contributions to the project.

1.4.6 Sampling size

Studies propose that the lowest sample size for Maximum Likelihood Estimation (MLE is 100 to 150, as MLE is sensitive to sample size (Khine, 2013). There were 50 construction workers, 20 project managers, and 30 project management teams in the sample. Furthermore, a large construction organization was chosen that included 20 project managers. Only three of the five people scheduled to attend the interviews as agreed by the organization showed up, the other two withdrawn. Interviews were done according to the interview guide (Appendix E). The researcher then spoke in-depth with each of the three subjects after that.

1.5 Delimitation of the research

Delimitations are the parameters set by the researcher to determine what to include and what to leave out of the research study. They focus your research to make it more digestible and pertinent to the point you are making (Collis & Hussey, 2003:128–129). Therefore, the study focused on stakeholder management in construction projects.

1.6 Ethical considerations

According to Saunders, Lewis, and Thornhill (2009:183–184), in terms of the rights of others who come into contact with or are impacted by one's work, ethics relates to the propriety of one's behaviour. Hair et al. (2011:55) concur with Saunders et al (2009:184) that ethical issues and potential predicaments need to be considered throughout the research process. Coercing participation, risking physical or psychological injury, protecting privacy, and disclosing the purpose of the research to individuals are among some of the ethical issues

The ethical standards used in this study were consistent with those of Hair *et al* (2011:55):

- Before beginning the study, the researcher was required to complete a protocol step that involved getting an ethical certificate from the Cape Peninsula University of Technology (CPUT) Ethical Committee (Appendix F).
- The owner-managers of building project businesses provided permission letters to the researcher.
- All respondents were informed about the study's goal by the researcher.

- The participants were not forced to take part in the research.
- Every participant was given the choice to leave the study whenever they were ready.
- Data and individual details of respondents were kept absolutely private.

1.7 Significance of the study

The study offers consistent techniques for other researchers to assess and offer suggestions on how to handle stakeholder challenges. The study acts as a roadmap for project management teams seeking to methodically approach stakeholders in construction projects. The study demonstrates how improved stakeholder management and problem-solving skills may meet stakeholders' needs and ambitions while also raising construction projects' performance and expectations. People involved in managing and monitoring the project also gain some insights and lessons from this study.

1.8 Structure of the thesis

Chapter1*:* This chapter provides the background information of the study under investigation and introduced the reader to the thesis. This chapter outlines the problem statement, study objectives, research questions, and importance of the dissertation, ethical considerations, and boundaries.

Chapter 2*:* This chapter, which is based on a review of the literature, covers the concept, management, form, and process of stakeholders as well as the important success factors for stakeholders in construction projects, stakeholder analysis, stakeholder management rates, and stakeholder management methodologies.

Chapter 3: This chapter describes the methods used to acquire the data as well as how the population, ethical issues, strengths, limitations, dependability, and validity of the study were all taken into account.

Chapter 4: This chapter focuses on (data collection and interpretation of the results) gathered from all parties interested in the investigation, including the instrument utilized and the review and inferences made from the information gathered from each study participant.

Chapter 5: This chapter focuses on the conclusion and recommendations. It also shows whether the researcher was able to prove that stakeholder management impact project success.

1.9 Chapter summary

The reader was given a summary of the study's history and background of the study. The problem statement, study aim, research questions, and study objectives were all covered in this chapter. The data gathering procedure was presented, along with a brief explanation of each methodology and research design. The key terms used throughout the study are defined for the reader. There is a brief assessment of the study's significance, ethical concerns, and constraints.

CHAPTER TWO
LITERATURE REVIEW

The chapter reviews scholarly literature in regards to stakeholder management, types of stakeholders, the stakeholder management process, and crucial success factors for stakeholders' management in construction projects, stakeholder analysis, the levels of stakeholder management, and the creation of stakeholder management strategies, with a focus on construction stakeholders and project success.

2.1 Introduction

The importance and relevance of stakeholder management in construction projects has been shown by an increasing number of research studies (Hornstein, 2015:291). El-Sawalhi and Hammad (2015:157–169) show that the complexity and unpredictability of projects has resulted in a poor track record for stakeholder management in the construction industry over the past few decades. According to Walker, Bourne, and Shelley (2008:645–58), stakeholder management in construction projects has a number of challenges. These include: a lack of stakeholder participation; unclear stakeholder management objectives; difficulties recognizing the "invisible" stakeholder; and inadequate stakeholder communication. To deal with these problematic issues, the project team must understand the importance of managing stakeholders (Aapaoja & Haapasalo, 2014:43). The role and responsibilities of construction stakeholders in project execution as well as the entire stakeholder management process are explored to find gaps in the available literature on project stakeholders, stakeholder management theory, and structures.

2.2 Stakeholder definition

Individuals or organizations that are impacted by or have an impact on a company's outputs or deliveries are referred to as stakeholders (Aaltonen, 2011). According to Aapaoja and Haapasalo (2014:43), a group or individual with expectations for or an interest in the project's success is referred to as a stakeholder. Yang and Shen (2015) adopt a similar definition who define stakeholders as people or organizations that have an interest in the project or some part of ownership or rights and have the ability to influence or be impacted. Project Management Institution (2010) defines stakeholders as people or groups who actively contribute to the project or whose interests may be influenced, either favourably or adversely, by its execution or completion. Newcombe

(2003:841–848), propose the importance of distinguishing between "client" and "stakeholder," which refers to the financial sponsoring organization that is directly in charge of the project's production and development. Project stakeholders are investigated as multiple "clients" for construction projects. The term "project stakeholders" has also been advocated for by a number of researchers and academics. According to Weiss (2014:66–69), a stake is a financial investment in a company or organisation as well as a stake in an activity. Stakeholders are people, groups, or other entities who have an interest in a project.

2.3 Type of stakeholders

According to Atkin and Skitmore (2008: 549–552), stakeholders can be divided into internal and external groups. Atkin and Skitmore (2008: 549–552) further suggest that owners, customers, suppliers, and employees are examples of internal stakeholders who actively participate in an organization's decision-making process, whereas those who are significantly impacted by an organization's activities are considered external stakeholders. External stakeholders include neighbourhoods, the local community, the wider public, and local authorities). Internal stakeholders are split into those who are concentrated around the customer on the supply side and those who are concentrated around the customer on the demand side. External stakeholders are classified into private and public participants. Carroll and Buchholtz (2006) also show a difference between primary and secondary stakeholders. Primary stakeholders are those whose involvement is necessary for the corporation to continue running, whilst secondary stakeholders are those that influence or are impacted by the company. In addition, stakeholders can be divided into those who have formal redress or contracted responsibility but are only connected to an organization in a secondary or indirect way as opposed to those who have no official redress but are connected in a primary or direct way (e.g., contractors, subcontractors, consultants). Figure 2.1 illustrates the typical construction project stakeholders.

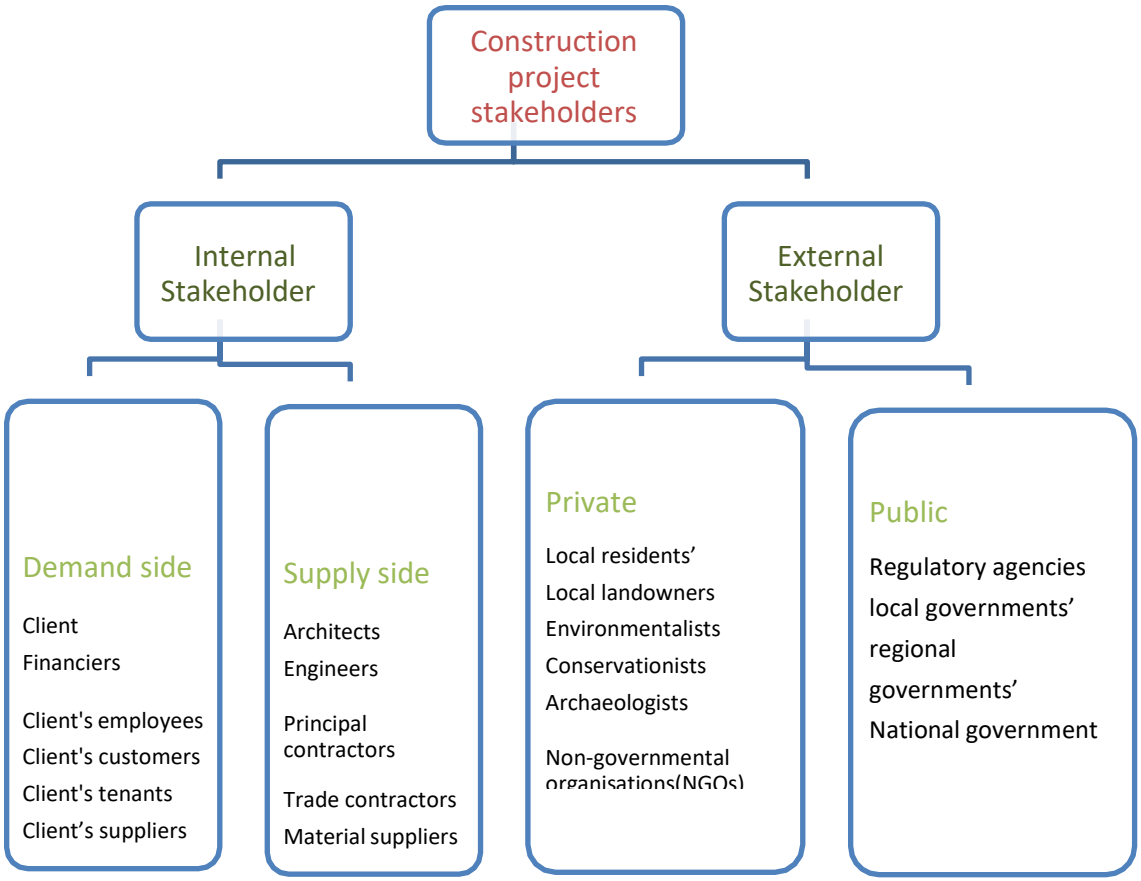


Figure 2. 1: Categorisation of construction stakeholders (Winch, 2010)

2.4 Construction project stakeholders

There are undoubtedly businesses in the construction sector given the significant participation of small and medium-sized businesses in the demand and supply chains. Construction projects involve a variety of stakeholders, including owners, sponsors, clients, local communities, subcontractors, project managers, superintendents, project team members, and end users (Al-Khafaji et al., 2010:59). El-Sawalhi and Hammad (2015:157-169) mention that stakeholders in construction include architects, consultants, material and product suppliers, government regulators, public agencies involved in issuing permits, insurance and bonding businesses, and the media. Enshassi, Abdul-Aziz, and Abushaban (2012) claim that other studies have identified stakeholders in a manner similar to their own, including facility users, project owners, managers, designers, shareholders, legal authorities, staff members, contractors, subcontractors, suppliers, process and service providers. Chinyio and Olomolaiye (2010:65–74) conclude by pointing out that traditional authorities, legislators, statutory approval agencies, town councils, planning departments, and contractors are also considered stakeholders in construction projects. Figure 2.2 shows how Yang et al,

(2010) embraced Freeman (2010) identification of the firm's stakeholders. Oyegoke (2010: 65–74) identifies a number of characteristics related to the variety and number of interested stakeholders on a project. As a result, stakeholders should have power attributes, ownership rights, and be able to be a user, sponsor, or supply chain participant. These stakeholders have the potential to be a project threat or opportunity; as a result, they are categorized according to how closely they are connected to and involved in the project's outcome (Harris, 2010: 41–55).

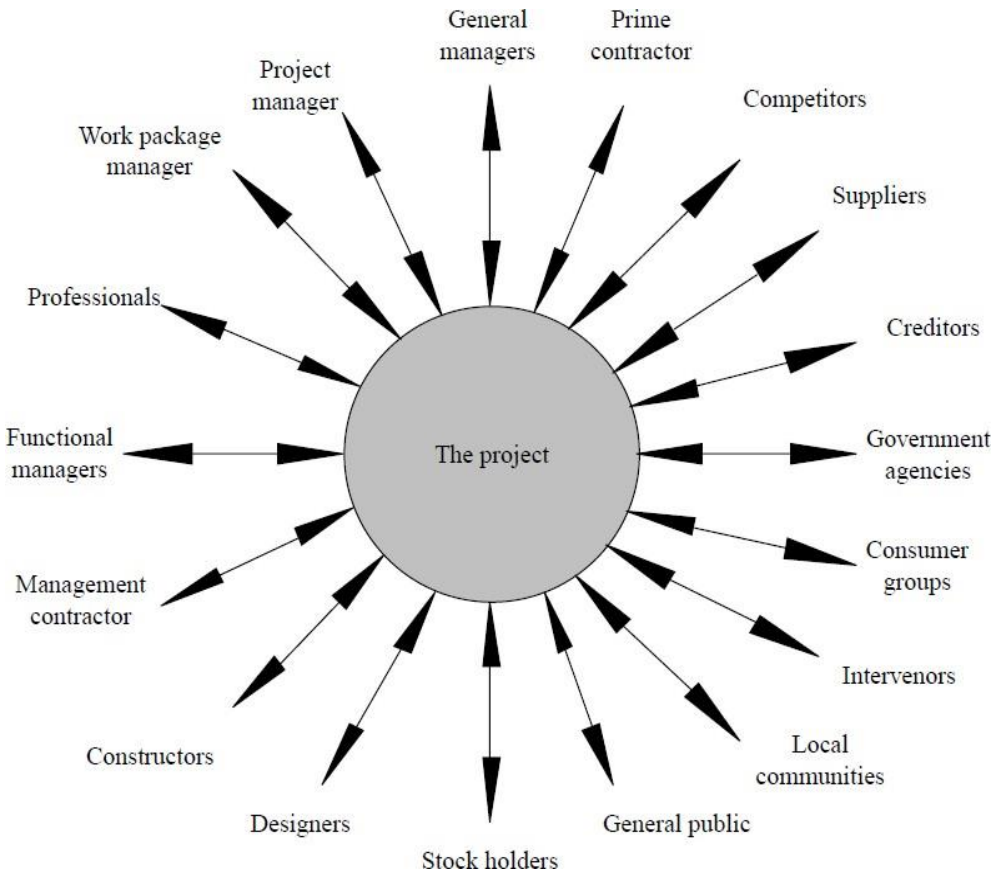


Figure 2. 2: Freemas's stakeholder's view of a firm (Yang *et al*., 2010)

A major stakeholder group is one without which a corporation cannot continue to operate as a going concern, whereas secondary stakeholders are those who have an influence over or are affected by the company. Stakeholders may also be divided into those who are contracted to provide services (such as contractors, subcontractors, consultants) and are in a primary or direct relationship with an organization, as well as those who are in an indirect or secondary relationship with the organization but do not have formal responsibilities or remedies (Smith and Love, 2004). Table 2.1 provides examples of stakeholders in construction projects based on the discussion above including articulations in figure 2.2.

Table 2. 1: Examples of construction project stakeholder

Stakeholder groups	Roles and objectives
Client	The client may be a public or private organization. However, in a housing reconstruction project, the government is the primary initiator, and the beneficiaries are the affected community. In a private building project, the client and the beneficiary are one and the same. The main distinction between a private and public construction project is this (Siriwardena et al., 2010).
Consultant	Offers technical (engineering, electrical, civil, etc.) expertise and project consultancy guidance for design and cost estimation (Siriwardena et al., 2010).
Funding body/ Donor	In addition to addressing humanitarian issues, contribute financially to the community initiative. Makes sure the money is being spent for what it is intended for. For instance, the donor must ensure that the money is used for community development in compliance with donor requirements (Siriwardena et al., 2010).
Contractor /subcontractors	The real structure is built in accordance with the blueprints, specifications, and contracts submitted by the relevant parties (Siriwardena et al., 2010).
Government	The government oversees developing and maintaining regulations and policies, as well as ensuring that they are followed (Harris, 2010).
General public	Volunteering to help clear waste and provide work during the construction phase of a home (Siriwardena *et al.*, 2010).
Beneficiary	This is possibly the most significant stakeholder. They benefit most from the project. It should be their duty to express their desires and requirements to the stakeholders participating in the housing rehabilitation project (Siriwardena et al., 2010).
International non-governmental	These fall between the financial source and the government, acting as a liaison. With their assistance, tens

organizations (INGO's) / Non-governmental organizations (NGO's)	of thousands of permanent homes and temporary shelters were constructed. (Siriwardena *et al.*, 2010).
Local landowners /neighbourhood	Own land: ensure that the project will not harm their interests. A community may be concerned about a loss of amenity (Harris, 2010).

2.5 Stakeholder analysis /classification

Stakeholder assessment, often referred to as stakeholder analysis, is a procedure that has recently arisen for assessing the anticipated interests and actions of stakeholders (Aapaoja & Haapasalo, 2014:43). Following stakeholder identification, stakeholder assessment has been highlighted as the next important factor (Yang and Shen, 2015; Olatunde and Odeyinka, 2021; El Sawalhi and Hammed, 2015; Aapaoja and Haapasalo, 2014).

This section examines how different stakeholders are grouped in accordance with their characteristics or attributes, their contractual connections to the project and among themselves, and their perspectives on the project. The following subsections go into greater depth about these participants.

2.5.1 Classification and analysis according to stakeholder attributes (Power, Legitimacy, Proximity and Urgency)

Stakeholders have traits which influence how they interact with the project, how they can assert their rights, and how they can control it. These four characteristics are power, legitimacy, proximity, and urgency (Mitchell et al., 1997; Walker et al., 2008).

Power: The capability of a stakeholder to positively or negatively influence the decisions made by other stakeholders or the project. There is potential for both gain and loss with this.

Legitimacy: Claims from stakeholders are assessed based on their apparent validity. It can also be described as project stakeholders who assume some risks that could benefit or hurt the project.

Proximity: This refers to the degree of involvement of the stakeholders in the project. Depending on how close they are to the project, they may participate there in person or remotely.

Urgency: the level of urgent need for response to stakeholder claims.

Since proximity is easier to operationalize and more straightforward to explain than legitimacy, using proximity as an attribute instead of legitimacy may be more advantageous (Yang et al., 2010:778–786).

According to their capacity to influence decisions and developments, their standing among other stakeholders, and the urgency of their claim to the project, Mitchell et al. (1997) divided stakeholders into groups in Figure 2.3. They categorize stakeholders based on whether they exhibit some, all, or none of the following characteristics:

- Power only: Dormant
- Legitimacy only: Discretionary
- Urgency only: Demanding
- Power and Legitimacy: Dominant
- Power and Urgency: Dangerous
- Urgency and Legitimacy: Dependent and
- Power, Legitimacy and Urgency: Definitive.

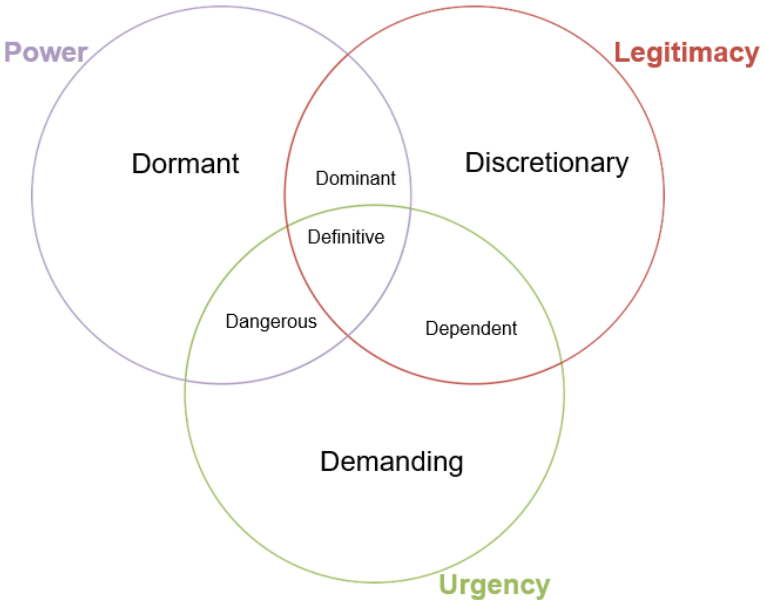


Figure 2. 3: Classification of stakeholders according to their attributes (Mitchell *et al*., 1997).

The various stakeholder classes are described as follows:

- Dormant: Despite having the ability to impose their will, they lack the authority and urgency to establish a claim on the company. They will not be able to exert any pressure on the project as a result, and their power will be wasted.
- Discretionary stakeholders: While they are in a position of responsibility, they lack the urgency and power to pressure the project management team to actively involve them. However, if they team together with other interests, they might be able to exert some pressure on the initiative.
- Demanding stakeholders: While lacking in authority or credibility, this collection of stakeholders has the quality of urgency. Due to the demanding nature of their stakes, management attention is necessary because if they are successful in forging relationships with other stakeholders, they may become more harmful.
- Dominant stakeholders: These stakeholders can contribute significantly to management's evaluation of stakeholders' needs because they have authority and legitimacy but lack urgency.
- Dangerous stakeholders: They do not have legality, but they do have power and urgency. They are in a position to not only create alliances but also to halt the effort through force and violence.
- Dependent stakeholders: These stakeholders do have urgency and authenticity despite their lack of authority. They therefore rely on other stakeholders to grant them the power they require so that they can impose their will on the project.
- The Definitive stakeholders: The key players who possess all three characteristics of urgency, legitimacy, and power. These people can command managers' initial attention and priority due to their distinctive personalities as they will already be involved in the project's crucial decision-making process. They are quite successful in forcing their will on the project.

Stakeholder classification is a crucial step in the stakeholder management process. It is used to determine how each stakeholder group will use its expectations on the project. This depends on the stakeholder’s authority and how expectations from stakeholder groups can affect the project's strategy (Newcombe, 2003: 841-848). Newcombe (2003) came up with two methods to analyse stakeholder classification figures 2.4 and 2.5: the power/predictability matrix and the power/interest matrix.

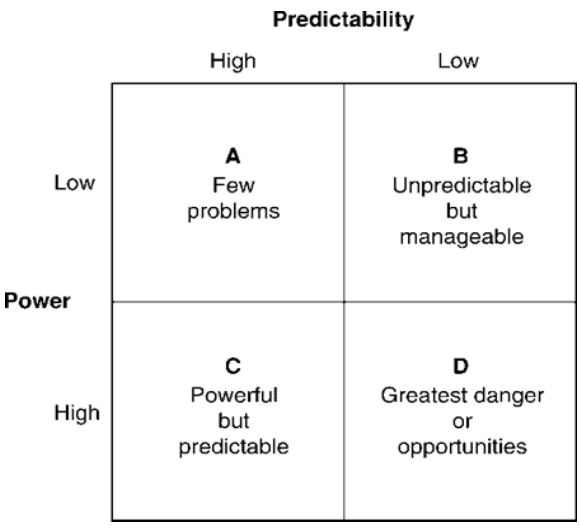


Figure 2. 4: Power/predictability

(Newcombe, 2003)

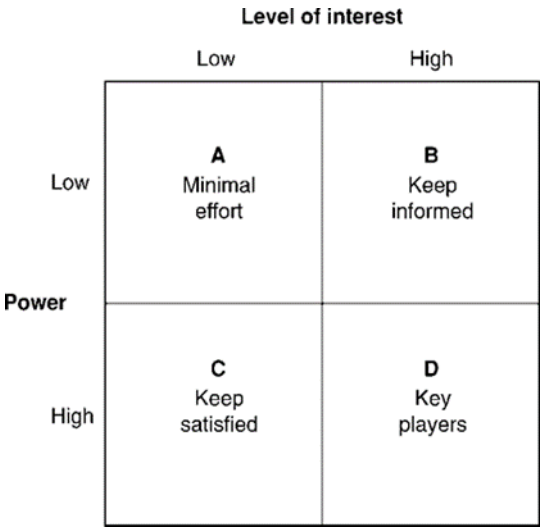


Figure 2. 5: Power/Level of interest

(Newcombe, 2003)

2.5.2 Classification and analysis according to vested interest-impact index (VIII)

Bourne and Walker (2005) claim to have developed the vested interest-impact index (VIII) as a stakeholder classification method. As a result of the fact that stakeholders can be thought of as project risks in some cases, Nguyen et al. (2009) determined that their approach is reasonable (including threats and opportunities).

According to Nguyen et al. (2009), the stakeholder degree of effect might be determined using the formula below:

$$I = \mathrm{P} + \mathrm{L} + \mathrm{U} + \mathrm{K} + \mathrm{D} \ .$$

Figure 2. 6: Stakeholder degree of effect (Nguyen et al. 2009)

Where;

I = Impact level of the stakeholder;

P = Power level of stakeholder;

L = Legitimacy level of stakeholder;

U = Urgency level of stakeholder;

K = Knowledge level of stakeholder;

D = Degree of proximity for the stakeholder.

On the other hand, the vested interest levels, the second parameter in the matrix (probability of impact). According to Bourne and Walker (2005), stakeholder vested interest (v) can be measured on a scale of 1 (very low), 2 (low), 3 (neutral), 4 (high), and 5 (extremely high).

Olander (2007:277–287) develops a four-step process for classifying stakeholders and determining a stakeholder impact interest for projects by combining the categorization bases of Mitchell et al. (1997) and Bourne & Walker (2005). Using a scale of 1 to 5, where 1 represents a very low value and 5 a very high value, the steps are based on assigning values. Firstly, make a stakeholder vested interest-impact index first (VIII) and secondly assess the type of stakeholder effect using an attribute value (A) based on the presence of power, legitimacy, and urgency. In the third stage, a position value (Pos) is established. In the fourth step, Viii*A*Pos is used to calculate the effect index for each stakeholder, and the result is added to produce the project's stakeholder impact index.

They were classified as follows based on the value of their final place: Pos = 0 for not committed, -0.5 for passive support, 0.5 for active support, and 1 for passive opposition. Therefore, stakeholders with position values above zero (0) are more likely to favour project advancement than stakeholders with position values below zero (0).

$$S_{II} = V_{iII} * P_{OS}$$

Figure 2. 7: Stakeholder impact index

Where:

SII = impact index of a stakeholder;
ViII = vested interest impact index;
Pos = Attitude position value.

Olander (2007) explains that the attitude position value (Pos) could be numerically assessed as: active opposition (Pos =1), passive opposition (Pos= 0.5), not committed (Pos= 0), passive support (Pos= - 0.5), and active support (Pos= -1).

2.5.3 Classification and analysis according to contractual relationship

Winch (2010) uses the contractual relationship between them and the client to classifying construction project stakeholders into internal and external stakeholders (Figure 2.1). Internal stakeholders are those who have legal contractual relationship with the project owner and are grouped into demand and supply sides stakeholders. External stakeholders do not have any contractual relationship with the project owner, but have some rights and interests in the project and are grouped into private and public sides' stakeholders (Winch, 2010). Stakeholders can also be classified based on their relationships with and proximity to the project: Those directly involved in the decision making and operations of the project are considered as primary or direct stakeholders whilst those who do not have any direct relationship and are operating remotely from the project are considered secondary or indirect or outside stakeholders (Newcombe, 2003; Smith & Love, 2004).

2.5.4 Classification and analysis according to stakeholder attitudes towards the project

Olander (2007) divides stakeholders between those who favour and those who oppose the project. On the other side, Aaltonen and Kujala (2010) divide them into pro, neutral, and anti-project groups. These are essential for decision-making and resource allocation in project management, especially when trying to persuade hostile, neutral, or unsupportive stakeholders.

These categorizations, which are displayed in Table 2.2, demonstrate the variety of viewpoints that scholars have on project stakeholders. Despite their differences, each classification is crucial for managing stakeholders because it depends on their objectives and connections to the project.

Table 2. 2: Summary of stakeholder classification

According to	Categories	Defining Characteristics
Stakeholder attributes	• *Dormant* • *Discretionary* • *Demanding* • *Dominant* • *Dangerous* • *Dependent* • *Definite*	• *Power only* • *Legitimacy only* • *Urgency only* • *Power and Legitimacy* • *Power and Urgency* • *Legitimacy and Urgency* • *All three attributes*

Stakeholder vested interest-impact index (viii)	• *Active opposition* • *Passive opposition* • *Not committed* • *Passive support* • *Active support*	• *Pos = -1* • *Pos = -0.5* • *Pos = 0* • *Pos = 0.5* • *Pos = 1*
Contractual relationship on the project	• *Internal* • *External*	• *Having a contractual link with the project* *Having no contract but could affect or be affected by the project*
Attitudes towards the project	• *Proponent* • *Neutral* • *opponent*	• *In support of project* • *Indifferent* • *Against the project*

2.6 Stakeholder management

Freeman (2010) states that, the term "stakeholder management" is necessary for an institution to effectively deal with its relationships with various stakeholder groups. Many other researchers agree with the definition (Yang, 2010; Eskerod & Jepsen, 2013). On the other hand, Eskerod and Jepsen (2013) describe stakeholder management as every intentional action taken with regard to stakeholders for increased project success. It has been demonstrated that, among other things, stakeholder management affects how well construction projects turn out globally. As a result, it's necessary to systematically identify, analyze, and plan communication and stakeholder impact initiatives (PMI, 2013).

Project stakeholders would have to be controlled due to the complexity of projects and the several parties with competing interests (Aaltonen & Kujala, 2010). Similarly, Eskerod and Jepsen (2013) believe that in order for initiatives to succeed and benefits to materialize, stakeholders must be managed. Therefore, in order to accommodate conflicting stakeholder interests and cause an appropriate balance of interests, particularly political interests, which are essential to the project's success, complex and risky initiatives need an efficient stakeholder management method (Mok *et al*., 2015: 446-457). Yang (2010) asserts that the construction industry performs poorly when it comes to managing stakeholders.

The importance of stakeholder management in attaining project success has also been shown in numerous studies. However, because it does not systematically

identify, engage, evaluate, and monitor these parties, the construction sector has a terrible track record when it comes to managing project stakeholders (Lock, 2007). Complex public sector projects (such as stadiums, hospitals, transportation infrastructure, and housing projects) in emerging nations include a number of stakeholders and must take the local environment into account. Engagement, stakeholder management systems, analysis methodologies, and stakeholder interests and influences must all be taken into account (Yang, 2010). The six activity categories of preconditions are stakeholder identification, assessment, decision-making, action and evaluation, and continuous support. (Yang, 2010).

Stakeholder management is a vital element in the project management process that ensures the project's success. The Tasmanian Government Project Management Guidelines (2011) offer a summary of the major parts of project management methodology and outline eleven crucial components that must be used throughout a project. Figure 2.8 illustrates the major elements throughout the project.

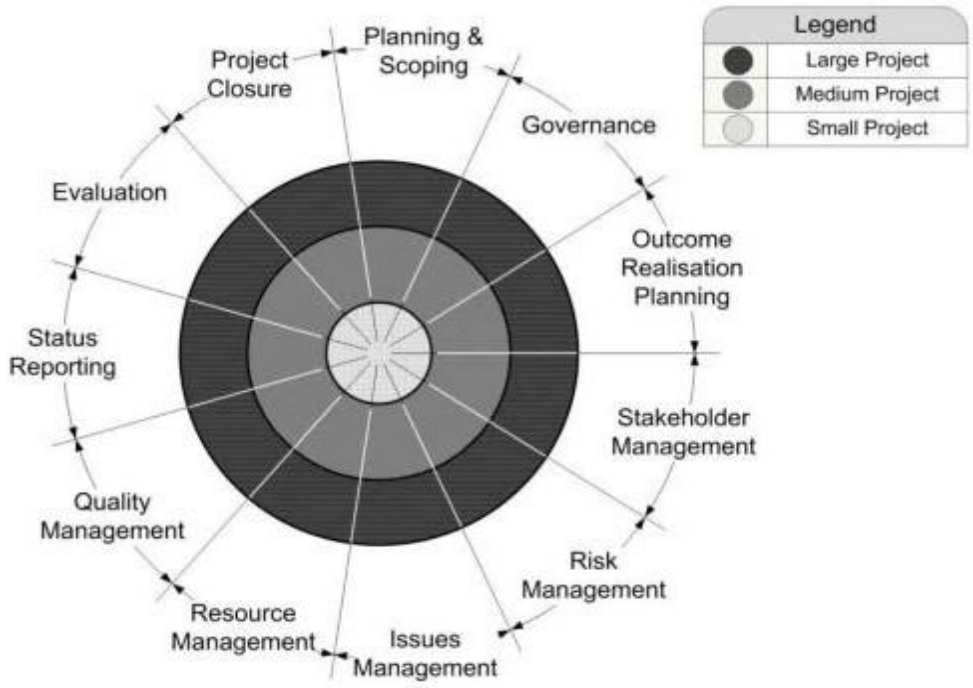


Figure 2. 8: Key elements in the project lifecycle (Tasmanian Government Project Management Guidelines, 2011)

Project managers need to identify and interact with the important entities and individuals within the project environment. Manowong and Ogunlana, (2010:121–137), Jepsen and Eskerod (2009:355-343) clarified the underlying presumptions of project

stakeholder management which included expanding efforts distributed across a variety of stakeholders rather than limited to a few, making deliberate plans to change project stakeholders to gain their contributions to the project, and allocating less resources so that they produce the best results possible. Bourne and Walker (2006:5-22) state that the objective of the benefit of stakeholder management project is to promote the use of proactive project management to minimize stakeholder activities that could negatively impact the project. In addition, another benefit is to support the project team's capacity to seize opportunities that foster stakeholder support for project objectives.

2.7 Stakeholder management process

Projects and activities involving persons, groups, and organizations are coordinated as part of the stakeholder management process (PMI, 2013). The PMI (2013) claims that the project management procedures depend on eleven areas, including stakeholder management, and phases such as initiating, planning, executing, monitoring, controlling, and closing. According to Lock (2007), a project can only be considered successful if it has been turned over to the project owner or end-user.

Olander (2006) outline the core assumptions of the stakeholder management process which could serve as a basis for developing a stakeholder management process. The steps in the process include: identifying the stakeholders; gathering information; identifying the mission; evaluating the strengths and weaknesses; identifying the stakeholder strategy; projecting stakeholder behaviour; and putting the stakeholder management strategy into practice. Management responsibilities that must be carried out as part of the process include planning, organizing, motivating, directing, and regulating the resources needed to deal with stakeholder plans. Karlsen (2002:19–24) provides a recursive six-step project stakeholder management strategy that involves preliminary planning, identification, analysis, communication, action, and follow-up. There are eight steps that can be used to break down managing stakeholder processes. These are developing a project stakeholder map; a chart of specific stakeholders; identifying stakeholder stakes; creating a power versus stake grid; determining the stakeholder management capability; looking at the dynamics of stakeholder interactions; conducting a process level stakeholder analysis; and conducting a transaction level stakeholder analysis (Elias et al., 2002: 301-310).

Young (2006) suggests a similar process model with a focus on stakeholder identification, information gathering, and influence analysis. Nevertheless, the process might be controlled in three steps: identifying stakeholders, prioritizing stakeholders, and creating a plan for engaging stakeholders (Bourne & Walker, 2006). Walker et al. (2008) list the following as the fundamental phases for stakeholder management: identification, prioritization, visualization, engagement, and measurement of communication effectiveness. Jepsen and Eskerod (2009) provided clarification on the underlying assumptions of the project stakeholder management process, which included creating plans to influence project stakeholders so that they solicit their participation to the project; allocating limited resources in order to produce great results; and distributing efforts across a variety of institutions rather than concentrating on less. Additionally, effective operational strategies for managing stakeholders include negotiation, intuition, incentives, concessions, workshops, and meetings (Chinyio & Olomolaiye, 2010).

2.7.1 Effective stakeholder management process

2.7.1.1 Having clear project objectives

Park et al., (2017) asserts that stakeholder characteristics are crucial to effective stakeholder management because project managers must choose the right stakeholder management tactics to address problems brought on by particular stakeholder traits. In mega-construction complex projects, clear project objectives, an agile response to change, and effective communication are critical elements of a successful stakeholder management (Park et al., 2017).

One of the five requirements for effective stakeholder management in complicated mega construction projects is having clear project objectives (Park et al., 2017). Project managers perform better in stakeholder when they are aware of the project's goals. Clear project objectives are mostly influenced by shared objectives and strategic flexibility (Park et al., 2017).

2.7.1.2 Agile response to change

Responding to environmental changes is one of five crucial priorities for an stakeholder management framework for complex projects(Park et al.,2017) .Three aspects of responding to environmental changes are addressing political, economic, and policy changes as well as changes in social values (Park et al., 2017). Project environment changes may affect projects and stakeholders. Managers of CPs should

be aware of these potential changes and know how to react correctly and quickly (Park et al., 2017).

2.7.1.3 Effective communication

Other crucial components of stakeholder management include effective communication and a clearly defined project (Park et al., 2017). The three essential components of good communication are two-way communication, minimizing unhappiness, and active stakeholder participation (Park et al., 2017). Building trust with stakeholders involves providing information with them, giving them enough opportunities to respond, and engaging in two-way communication.

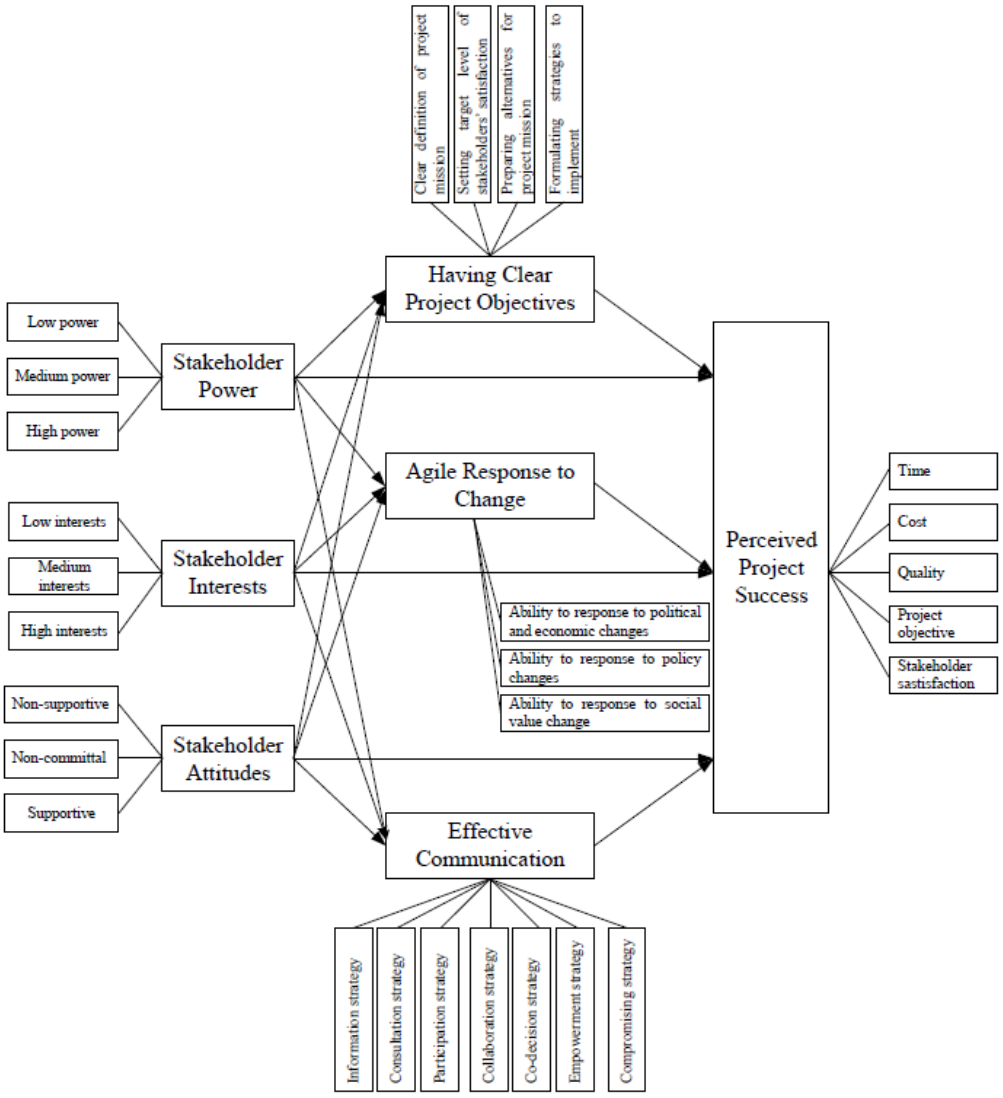


Figure 2. 9 Relationship between stakeholder characteristics and perceived project success (Nguyen & Mohamed 2018).

Table 2. 3: Summary of construction project stakeholder management process

	Researchers and Years of publication						
Processes for managing stakeholders	Mitchell and Lee (2019)	Wood et al.(2021)	Leonidou (2020)	Gregory(2020)	Amadi et al. (2020)	Armenia et at. (2019)	Novoa et al (2018)
Stakeholder identification	x	x	x	x	x	x	x
Examining stakeholders' qualities	x	x	x		x		x
Exchanging information and communicating with stakeholders	x		x	x		x	x
Information gathering about stakeholders	x	x		x			
Setting stakeholder priorities			x		x		
Identification of strengths and weaknesses				x			√
Keep track of the importance of the stakeholders.	x		x	x		x	
Examining stakeholders' influence		x					x
Create a stakeholder forum to regularly collect feedback.	x	x	x		x	x	
Establish a culture of blamelessness and a contract for resolving disputes.	x	x		x		x	
Determining the goals of stakeholders	x			x			x
Predicting the behavior of stakeholders		x		x		x	
Monitoring the communication's efficacy.	x	x	x	x	x		
Stakeholder visualization	x	x			x	x	
Engage stakeholders using "underlying" and "frontline" approaches		x				x	
Stakeholder management strategy identification		x		x		x	
Create strategies for stakeholder management and engagement	x		x		x		
Putting stakeholder management approach into practice			x	x		x	x
Conduct stakeholder management analysis	x		x		x		x

2.8 Stakeholder management critical success factors (CSF)

Understanding stakeholder-related aspects will help one make the best decisions possible during the project's starting point (Yang and Shen, 2015). Therefore, Critical Success Factors (CSFs) must be monitored closely. According to Othman (2013), developing countries begin construction projects with the goal of aiding development and ensuring project success. Gyadu-Asiedu (2013) asserts that one of the key industry difficulties in emerging nations is poor project performance. The performance metrics of time, cost, and quality have all been linked to project success (PMI, 2013). Moreover, PMI (2013), asserts meeting stakeholder needs and satisfaction is a key component. Nevertheless, construction projects are transient endeavours involving a variety of stakeholders. It is therefore challenging to gather together interested parties and experts for the construction project to be successful (Winch, 2010)**.** The project's success depends on the successful and ongoing management of its stakeholders (Yang& Shen, 2015; El Khatib, Alabdooli, AlKaabi & Al Harmoodi, 2020; Martinsuo & Geraldi, 2020; Wojewnik-Filipkowska & Węgrzyn, 2019; Errida & Lotfi, 2021; Alshawabkeh, R., Rumman, A. A., Al-Abbadi & Abu-Rumman, 2020). A project is deemed successful when it is completed on time, within budget, in line with specifications, and to the satisfaction of all parties involved (PMI, 2013). The management of stakeholders is essential for the project's delivery to be effective since institutions can have an impact on a project's performance.

According to South African Construction (2013), the following are essential elements for effective stakeholder management:

- Selecting qualified project managers and project management groups.
- Keeping thorough records of project decisions and developments to help resolve disputes.
- Clear controls, a high standard of accountability, and efficient execution of assigned tasks.
- Controlled communication monitoring.
- Stakeholders' decision to collaborate to handle the difficulties, install a more effective method to work together, manage, and monitor the project.
- Stakeholders' decision to collaborate to handle the difficulties, install a more effective method to work together, manage, and monitor the project.

Jepsen and Eskerod (2009) show that stakeholder identification, classification, and anticipating stakeholder expectations through stakeholder analysis are essential to the stakeholder management process. According to Olander and Landin (2008), there are four factors that influence stakeholder management: analysis of stakeholder needs and concerns; discussion of potential advantages and drawbacks with stakeholders; evaluation of alternative solutions; project management; and media relations. According to Tabish and Jha (2011), effective stakeholder engagement and the development of project priorities and goals can enhance stakeholder management in construction projects.

The support of top-level management, responding to the dynamics of power and interest, sustaining existing connections, being proactive, discussions, and trade-offs are all essential for the effectiveness of stakeholder management and engagement (Chinyio & Akintoye, 2008; Yang *et al., 2009;* Li *et al*., 2011). Figure 2.10 demonstrates how Yang et al. (2009) utilized factor analysis to comprehend and group into five key components, the 15 critical success elements for stakeholder management in the construction industry. The five key components are preparing, inputs of information, estimation of stakeholders, decision-making, and sustainable support. Li et al. (2011) further emphasized the significance of flexible project structure as a crucial component of stakeholder management in construction projects.

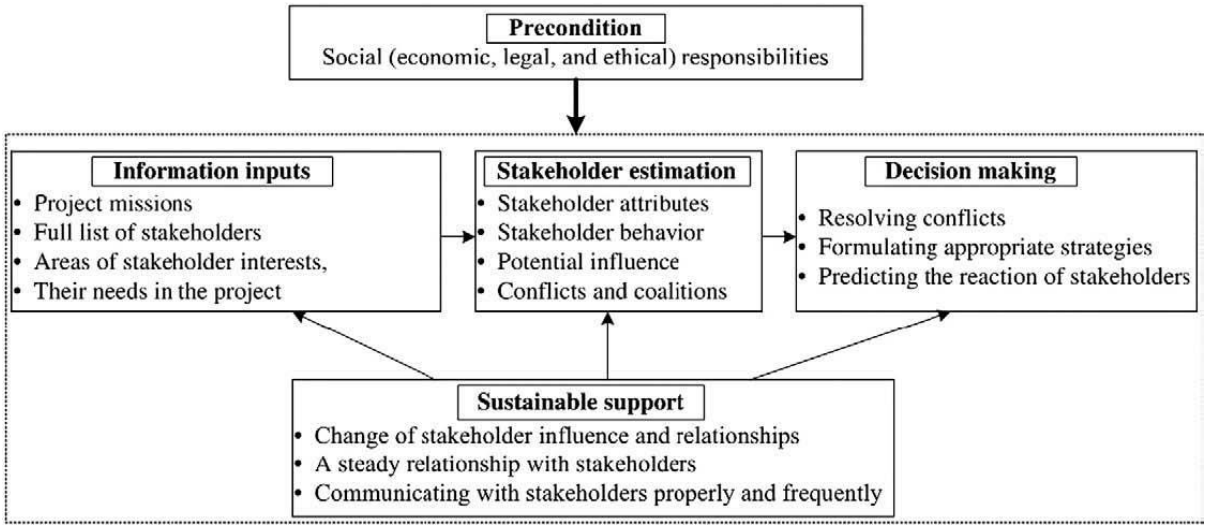


Figure 2. 10: Framework for critical successful stakeholder management in construction (Yang et al., 2009).

Yang and Shen (2014) introduced a structure identified as the "systematic framework for stakeholder management in construction," which included a box for "action and

assessment," based on the framework Figure 2.10 produced by Yang *et al*. (2009). Their approach is more comprehensive than Yang *et al*.'s, but it does not account for the construction life cycle or stakeholder management responsibility. It assumes that the project manager controls all, regardless of the many phases, construction project peculiarities, and procurement route consequences. The identified CSFs for stakeholder management in the construction industry are summarized in Table 2.4 and 2.5.

Table 2. 4: The Critical Success Factors (CSFs) for Stakeholder Management in Construction Projects

No	Name of Scholars	Critical success factors
1	Mashali et al.(2022)	*stakeholder information input factors: formulating a clear project mission statement, identifying stakeholders properly, understanding stakeholders' interest areas and exploring stakeholders' needs and constraints.*
2	Ola-awo et al.(2021)	*sustainable support factors: compromising conflicts among stakeholders,formulating appropriate strategies and predicting stakeholders' reactions to strategy implementation.*
3	Wuni and Shen (2020)	*Stakeholder identification, prioritization, visualization, engagement, and communication effectiveness evaluation are all necessary.*
4	Li et al.(2019)	*The identification, analysis, monitoring, and control done systematically*
5	Molwus et al.(2017)	*Factors affecting stakeholder estimation include studying stakeholder coalitions and disputes as well as estimating stakeholder qualities and behavior.*
6	Eyiah-Botwe et al.(2017)	*Communication with and engaging stakeholders properly and frequently exploring stakeholder needs to projects*
7	Fummey (2017)	*project manager decision-making factors: keeping and promoting good relationships, analyzing changes in stakeholder influences and relationships, communicating with and engaging stakeholders, managing stakeholders through CSR.*
8	El- Sawalhi and Hammad (2015	*To manage information; inputting information and assessing*
9	El- Sawalhi and Hammad (2015	*The decision making, supporting continuously, acting and evaluation.*

10	Aapaoja and Haapasalo (2014)	*Defining the project's objectives and the client's constraints; identifying the project's stakeholders in accordance with their functional duties; assessing the significance of each stakeholder and the likelihood that they will have an influence or be able to participate; Four groups of stakeholders have been identified, ranked, and prioritized.*
11	Eskerod and Jepsen (2013)	*Engaging in all worthwhile interactions with project stakeholders in order to improve project success. Identifying, evaluating, and prioritizing stakeholders*
12	Bal et al. (2013)	*Goals are implemented by identifying stakeholders, interacting with issues, prioritizing stakeholders and issues, managing stakeholders, and measuring performance.*
13	Chinyio and Olomolaiye (2010)	*Identifying and categorizing stakeholders to engage with initially and afterwards in a timely, organized, and coordinated manner*
14	Yang (2010)	*Establishing the necessary conditions, identifying and evaluating the stakeholders, making decisions, taking action, and conducting ongoing evaluations.*
15	Jepsen and Eskerod (2009)	*Determining which technique to employ to influence each stakeholder after identifying the (essential) stakeholders, describing them, and highlighting their (a) needed contributions, (b) expectations for incentives for contributions, and (c) power regarding the project.*
16	PMI (2008)	*Identifying stakeholders, preparing the message, disseminating it, managing expectations, and reporting the results.*

Critical success factors (CSFs) are project management practices that, when taken into account, can directly or indirectly contribute to the success of a project. They cover a wide range of elements that must be coordinated to assure project delivery on schedule (Alias et al., 2014). To increase the efficiency of project delivery, research on critical success factors (CSFs) and project success is essential (Chan et al., 2004).

According to Alias et al. (2014), crucial success elements include managerial action, project procedures, human factors, external issues, and project-related factors. Alias et al. (2014) suggest the following are other crucial success factors

- Clearly stated objective,
- Rightly considered project requirements,
- Relationship based on trust,
- Top management support,
- Sufficient funds and other resources,
- Technical competence of the project team, and
  Excellent communication

Table 2. 5: The main factors that scholars have identified for managing stakeholders

Critical success factor	***Karlsen (2002)***	***Elias et al. (2002)***	***Young (2006)***	***Bourne and Walker***	***Olander (2006)***	***Lock (2007)***	***Walker et al. (2008)***	***PMI (2008)***	***Jepsen and Eskerod***	***Chinyio and Olomolaiye***	***Yang (2010)***	***Eskerod and Jep en***	***Hammed and El Sawalhi(2013)***	***Bal et al. (2013)***	***Aapaoja and Haapasalo***
The pre-stakeholder identification		x									x		x		x
The stakeholder identification	x		x	x	x	x	x	x	x	x	x	x	x	x	x
The stakeholder assessment											x	x	x		x
The stakeholder classification		x	x		x					x					x
The stakeholder prioritization		x	x	x			x		x			x		x	x
The stakeholder analysis	x	x	x			x		x							
The stakeholder engagement/ communication / conflict resolution	x			x	x		x	x	x	x		x		x	

The implementation, monitoring and feedback	x				x	x	x	x	x		x			x	

According to the literature review, the stakeholder management strategy's main factors are as follows: identification, evaluation, classification, prioritizing, analysis, engagement, communication, and settlement of conflicts with stakeholders; implementation; monitoring; and feedback. Prior to the official stakeholder management process, three of the five studies by Crane and Ruebottom (2011), Aaltonen (2011),Wagner Mainardes et al.(2012), Missonier and Loufrani-Fedida(2014), and Yang (2014), examined between 2010 and 2014 demonstrated the importance of pre-stakeholder identification considerations.

2.8.1 Pre-conditions

The consideration of pre-conditions is necessary for construction stakeholder management (Yang, 2010). Pre-conditioning, on the other hand, is never mentioned as a major feature in the systemic model established. Instead, each essential part of the suggested stakeholder management system should take into account the necessity of economic, legal, cultural, and ethical challenges. Gudiene et al. (2013) mention extrinsic variables—such as economic, legal, cultural, ethical, social, and political issues—that must be assessed in developing nations before a project can begin. Aapaoja and Haapasalo (2014) emphasize the goal and client restrictions. According to Davis (2014), it is important to include stakeholders' viewpoints on a project's success. This is because managing stakeholders is a soft talent in project management. The effective stakeholder management and project completion, pre-stakeholder factors must be taken into account. (Elias et al., 2002; El-Sawalhi &Hammad, 2013; Aapaoja & Haapasalo, 2014).

2.8.2 Stakeholder identification

The next key element mentioned is stakeholder identification. The formal stakeholder identification component was determined to be the only shared characteristic found across all fifteen models examined (Karlsen, 2002; Aapaoja & Haapasalo, 2014). However, there was no consensus on how and when to identify stakeholders. Studies have recommended stakeholder identification as the first factor to take into account (Karlsen, 2002; Elias et al., 2002; Young, 2006; Bourne & Walker, 2006; Olander,

2006; Lock, 2007). Eskerod and Jepsen (2013) and Jepsen and Eskerod (2009), state that stakeholder identification happens at every level.

- At the project definition stage, the identification of stakeholders occurs;
- Knowledgeable staff members identify stakeholders;
- All parties are involved from the beginning;
- Prior to project design approval, all stakeholders are identified;
- Develop a solid plan for timely stakeholder information;
- Leave out any late stakeholders;
- Review a current stakeholder list; and
- Have a registration with an open layout.

According to Koster (2009), it is imperative to identify important project stakeholders early on in the project lifecycle in order to maximize efficiency. Koster (2009) goes on to say, it helps with understanding where to invest the resources as the project manager and to identify who the key decision makers are at any given moment, so one can ensure that is talking to the right people, at the right time.

2.8.3 Stakeholder assessment

Stakeholder assessment remains a major critical factor for success as it involves stakeholders evaluating the project or firm based on their needs and interests (Yang, 2010; Eskerod & Jepsen, 2013; Hammed & El Sawalhi, 2013; Aapaoja & Haapasalo, 2014). The features, attitudes, and interrelationships of stakeholders should be considered when they are being evaluated (Yang, 2010). The PMI (2008) state that, it is essential to determine the intended level of involvement for stakeholders that have been identified, define the specifics of the claim for each stakeholder, and evaluate the individual stakeholder's capacity to advance the claim. Aapaoja and Haapasalo (2014) argue that before analyzing the stakeholders, it is necessary to categorize and prioritize them.

2.8.4 Stakeholder classification

According to Aapaoja and Haapasalo (2014), stakeholder classification is a significant aspect since it aims to categorize stakeholders for successful participation. Most authors consider stakeholder type identification as part of the stakeholder management process. Nevertheless, when diverse stakeholders are expected to have distinct impact, stakeholder identification becomes required. The many project

stakeholders each have different expectations and interests. Chinyio and Olomolaiye (2010) are of the opinion that, some stakeholders are more crucial to the success of the project than others, however this could divert as it moves forward and more interested parties broaden their base of support.

2.8.5 Stakeholder prioritisation

Mitchel (1997) claims that in line with the notion of the power, urgency, and legitimacy of the demand of stakeholders, the prioritization of stakeholders is a significant factor. According to Mitchell (1997), seven different types of stakeholders, those who are dormant, discretionary, demanding, dominant, hazardous, reliant, and definitive are defined based on the stakeholder's strength, urgency, and legitimacy claim. The least imperative factor to consider is the dominant, while the definitive is the most important. Prioritization is one of the five essential components of managing stakeholders using the stakeholder circle. It's crucial to keep in mind additional elements that make prioritizing stakeholders necessary, including interest, significance, impact, position, closeness, and agreement with the project owner, commitment, duty, and role (Aapaoja & Haapasalo, 2014).

2.8.6 Stakeholder analysis

Stakeholder analysis is an important aspect, although several authors offer it in different ways. While early authors stated stakeholder analysis as a factor in the stakeholder management process, it is now recognized as a factor with associated factors (Karlsen, 2002; Elias *et al.,* 2002; Young, 2006) Thus, the assessment, classification, and prioritisation of stakeholders are stated instead of the analysis of the stakeholder (Yang, 2010; Eskerod & Jepsen, 2013; Aapaoja & Haapasalo, 2014). The analysis of the stakeholders is a procedure for carefully acquiring and assessing the quantitative and qualitative data to determine which interests must be taken into consideration (PMI, 2008). As a result, the process identifies the interests, influence, and expectations of stakeholders. It also Identifies the type, significance, and possibility of stakeholder influence and position, as well as whether or not they are for or against the project (Olander, 2007).

A negative attitude from interested stakeholders can sabotage or hinder the implementation of a construction project. This is caused by conflicts and debates over the design and implementation of the project design. Such obstruction will result in cost overruns and timetable delays (Olander &Landin, 2005: 321). An assessment of

stakeholder demands and impact should be considered a required and vital element in every construction project's design, implementation, and conclusion. If stakeholders' perceptions are not taken into consideration, they can be able to use their influence and degree of interest to affect project outcomes in their favour. This is applicable when there are erroneous assumptions and preconceived notions (Enshassi, Abdul-Aziz, and Abushaban, 2012),

Different mapping strategies have been developed as a result of the necessity for a workable, practical method of visualizing stakeholders (Bourne& Weaver 2010: 99–120). The process of mapping stakeholders makes use of a qualitative evaluation of each stakeholder's importance in using a network of connections to influence a project. According to Bourne and Weaver (2010), the employed dimensions are power, support, influence, interest, and attitude. Stakeholder mapping provides a clearer picture of the relationships, communication, and evaluation of project delivery and implementation among stakeholders.

2.8.7 Stakeholder communication /engagement

Stakeholder involvement and communication are the most crucial project stakeholder management steps. Studies show that having good project management is essential for every project to succeed. Al-Khafaji et al. (2009) contend that any organization's ability to create and uphold an ongoing, active relationship is essential to its survival. Many scholars think that effective project communication is essential to the project's success (Gudiene et al., 2013; Osei-Kyei & Chan, 2015). Yang (2010) cites that the second crucial success factor for stakeholder management is the excellent stakeholder communication and engagement. The project communication management is a part of the complete stakeholder management process (PMI 2008). Construction project stakeholders come from a variety of social, cultural, and organizational backgrounds. It is necessary to recognize and address the needs, goals, and expectations of many stakeholders and communication management is required for project information.

The Project Management Institute (2008) notes that project information management necessitates the timely generation, collecting, dissemination, retrieval, and disposition of information. At the management level, getting to know and understand one another is the main goal of stakeholder engagement. Meetings give stakeholders a chance to

debate, communicate, and agree on expectations as well as values and principles that everyone has to follow. Al-Khafaji et al. (2009) is of the opinion that, for communication to be effective it requires the correct timing, simplicity, clarity, and relevance, additionally possible are non-verbal and vocal modes of communication, including those expressed through expression, expressive actions, and/or body language. The information flow can also be horizontal, vertical, or in any direction.

The project's stakeholders must be given information in a way that is simple to grasp and has the desired impact on the project's success (Bourne & Weaver, 2010; Eskerod & Jepsen 2013). Therefore, it is necessary to develop a plan for organizing, communicating, and managing information. A communication plan, the initial step, is therefore essential for stakeholder communication. A communication strategy must encompass the following topics and can be presented as a template or map:

- What type of information one intends to communicate?
- Who is going to receive the communicated information?
- Time frames regarding when to communicate the available information
- How to structure communication? and
- What are the constraints or challenges?

According to Eskerod and Jepsen (2013), involving communication can be successful once all stakeholders have been accurately and completely identified, classified, and given priority. In addition, the stakeholder's attitude, expected advantages, and level of interest, importance, and commitment influence the kind of information to provide. According to PMI (2008) and Chinyio and Olomolaiye (2010), the project manager should select an effective way of communication or channel for sharing the information. Channels include things like phones, emails, instant messages, social media sites, and software.

Martinez and Olander (2015) provide a suggestion that who one should communicate with is determined by the project's stakeholder evaluation. Furthermore, internal and external stakeholder communication plans are different. Takim (2009) recommends that project stakeholders be kept informed at all times in order to provide useful feedback. Studies have identified reactive and proactive approaches to

communication. A reactive strategy is based on the activities of stakeholders, whereas a proactive approach involves the project manager taking the initiative to connect with stakeholders in advance (Chinyio & Olomolaiye, 2010). Studies show that a proactive strategy is superior to a reactive strategy since it gives a project manager more control over the project when the stakeholders involved take the first steps (Eskerod & Jepsen, 2013).

2.8.8 Action and evaluation

According to Yang (2010), the proposed framework, which is largely geared toward developed countries, must include both action and evaluation. Since monitoring and control are crucial to project communication management, stakeholder management is a crucial component. Stakeholder management is taken into account during the project feasibility and planning stages (Ajam, 2014). A few significant parts that require their own strategy or plan each include a pre-stakeholder plan, stakeholder identification plan, analysis plan, and engagement plan. Eskerod and Jepsen (2013) state that stakeholder management strategies are implemented as the project advances, as required at each project stage. However, performance must be tracked, reviewed, and regulated. As previously indicated, project objectives and stakeholders may change during execution, necessitating monitoring and feedback reviews. Yang (2010) offers guidance on adopting strategies, assessing the results of stakeholder management, and measuring stakeholder satisfaction with involvement. As project participants' power and base change, monitoring and feedback become increasingly important. It is also vital to evaluate the efficiency of the strategies established for the primary issues in terms of implementation.

2.8.9 Stakeholder value

All construction project's stakeholders are critical to its success. The success of construction projects is not guaranteed by the use of hard skills in project planning (Davis, 2014). Eskerod and Jepsen (2013) assert that without careful consideration and management of the project stakeholders, a project cannot be initiated, finished, or reap the advantages. The argument for project benefit realization is based on the idea that project stakeholders can affect, influence, and impact a project. Stakeholder actions and reactions to change are described using convergent stakeholder theories. Project managers must strive to build reciprocally trusted and cooperative relationships with interested parties as a result of the shift in stakeholders' actions.

According to Eyiah-Botwe, Aigbavboa, and Thwala (2016), stakeholder power, and characteristics can influence the management process in a positive or negative way, hence it is important to take stakeholder value into account. Project managers have lost control of the project due to the negative effects of stakeholders on the development of projects, which has led to time and cost overruns.

2.9 Stakeholder management strategies and approaches

Stakeholder demands and claims may cause construction projects to respond in a variety of ways to cope with the challenges that have arisen. Aaltonen and Sivonen (2009) found that project firms may utilize a variety of strategic solutions in response to the pressures of stakeholders. They outline and describe five distinct stakeholder management tactics, from passive to active techniques that project businesses may use. Table 2.6 provides an explanation of these strategies.

Table 2. 6: Stakeholder management strategies (Aaltonen and Sivonen, 2009)

Response strategy	Explanation
Adaptation strategy	Observing the requirements and guidelines outlined by stakeholders. It is believed that responding to pressure from external stakeholders is preferable than meeting demands and achieving the project's objectives.
Compromising strategy	Negotiating with stakeholders, hearing their concerns about the project, and offering them alternatives and discussion forums. Account reconciliation and payment of compensation. The initiative extends an invitation to stakeholders.
Avoidance strategy	To cut relations with stakeholders and their demands to defend oneself from allegations. Transferring responsibility for responding to charges to another project network participant.
Dismissal strategy	Ignoring the stakeholder demands that have been stated. Stakeholder pressures and requirements are not considered throughout project implementation.

Influence strategy	Proactive moulding of stakeholders' expectations and values actively exchanging information with stakeholders and building relationships with them

Jepsen and Eskerod (2009) claim that project managers encounter some challenges while implementing the stakeholder analysis best practices during the stage of building, even though the product of this stage is crucial in developing the stakeholder management strategy. They go on to state that because some of the stakeholders identified as being vital to the project are difficult to reach, it takes a long time for project managers to undertake the analysis of stakeholders. As a result, they suggest deciding on and implementing a stakeholder management approach before gathering the necessary data. Manowang and Ogunlana (2010) assert that it is conceivable that the problem results from the idea that they skipped the stakeholder analysis process prior to the construction phase. In order to overcome this difficulty, it is essential to examine the elements that make conducting stakeholder analysis difficult both during the project's construction phase but also in its early phases. They show their strategic stakeholder management structure in Figure 2.11. Manowang and Ogunlana (2010) state that the four key goals of stakeholder management are formalized stakeholder analysis (SA), strengthened stakeholder relationships (SR), sustained stakeholder commitment (SC), and elevated stakeholder satisfaction (SS).

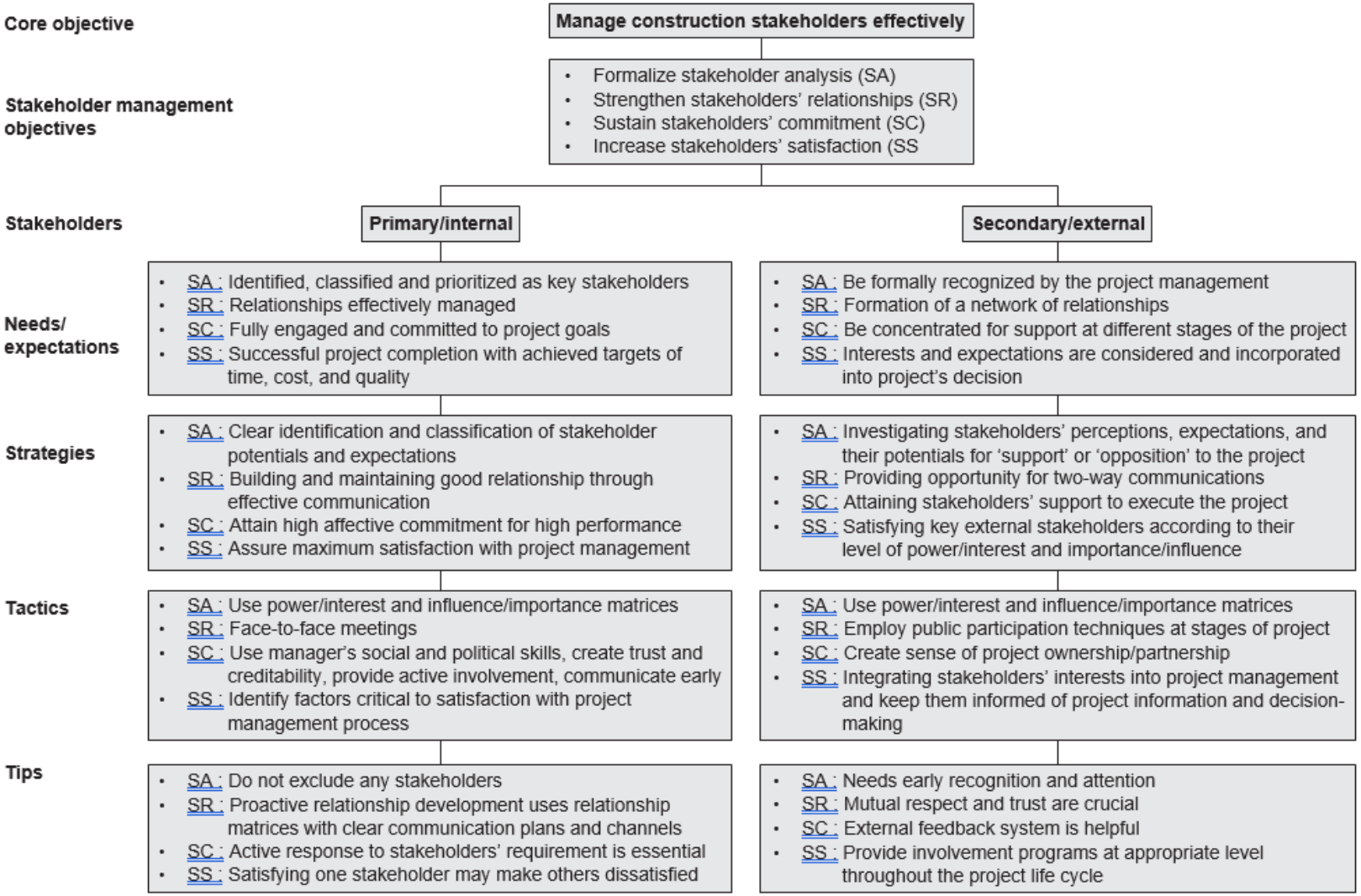


Figure 2. 11: Chart of strategic stakeholder management (Manowang & Ogunlana, 2010)

The flowchart describes the strategies to employ to satisfy the demands and objectives of both internal and external/secondary stakeholders. Most of these are concerned with managing construction stakeholders effectively.

Chinyio and Akintoye (2008), propose a number of methodologies which are practical for managing and involving stakeholders in construction industry. They separated them into two groups: overarching (underlying) and the operational (frontline) approaches. The broad, "higher order," or "behind-the-scenes" concepts that guide practice and are frequently employed are described as the underlying techniques as medium- to long-term guidelines that affect employee behaviour. On the other hand, depending on the situation, approaches to the frontline are operational strategies that are frequently deployed. For instance, using effective communication in operational approaches can help to maintain the relationships that exist, comprehend stakeholders' expectations of the project, and keep them well informed. Conversely, negotiation can be very helpful in settling disputes and claims that arise during the project life cycle. Anderse (2010) point out that as the project progresses, project managers' ability to assess the strength and stakeholders' interest may be able to tell them whether those parties are now less or more eager to impose their will on the project. Incentives and concessions may be used independently or together to soothe or diminish the concerns of opposing stakeholders.

Stakeholders can be reached through meetings and workshops throughout the project (Bal et al., 2013). According to Eskerod and Jepsen (2013), project managers should be able to put these suggestions into practice to ensure the success of their projects. Additionally, their study examined approaches for dealing with concerns from outside stakeholders, which might only be successful if internal stakeholders are content. However, depending on how the project was procured, project managers might not be accessible in the early stages of the process, which highlights the significance of connecting the design and construction stages as well as taking into account the worries of both internal and external stakeholders while developing and implementing a stakeholder management plan approach (Harris, 2010).

Table 2. 7: Approaches for engaging stakeholders (Chinyio and Akintoye 2008)

Overarching approaches	Operational approaches
The systematic approach Focus on providing top-level support React proactive Sustaining the existing relationship Reacting to power-interest dynamism	The application of effective communication People skills - management People skills - negotiations Trade offs Incentives Concessions Workshops and meetings Intuition

Bourne (2005) developed the stakeholder management cycle to identify, visualize, and map stakeholder involvement on projects. The stakeholder cycle has five steps which are illustrated in figure 2.12.

Figure 2. 12: Stakeholder Management Cycle (Bourne, 2005)

The stakeholder cycle is a general method that can be applied to start proactive stakeholder management in any project, not just building projects. It acknowledges the value of being mindful of the project's many phases by repeating the procedures in light of monitoring findings, particularly while transitioning from one phase to the next.

According to Yang et al. (2011), the majority of approaches should be combined with others. There is no such thing as a stand-alone approach, project managers must choose approaches that are appropriate for the stakeholder management process, and the decision must take into consideration the available time and resources, as well as analyses' the social and cultural context.

Figure 2.13 displays some of the most widely used techniques for identifying and engaging stakeholders.

Approaches	Strengths	Limits	* analysis	Engagement **
Formal memos	• Provide thorough details regarding stakeholders	• Can be time consuming to document the information	X	
Meetings	• Cheap and relatively easy to organize • Utilizes current networks and enables the targeting of particular stakeholders • Face-to-face interaction guarantees attendees are aware of the concerns and allows for information gathering regarding their expressed viewpoints.	• Unknown issues and previous relationships between the stakeholders may drive responses • Opinions might not be representative of the wider community		X
Interviews	• Allow in-depth discussion and understanding of issues • Individual contract means that the location of the meeting is flexible • Able to explain points in own language • Usually low cost and easy to arrange	• Can be time consuming for the project team • Can be expensive • May not have sufficient time • Requires skilled interviewers • Little quantitative information gathered and not majority opinion	X	X
Approaches	**Strengths**	**Limitations**	*** analysis**	**Engagement ****
Negotiations	• Cheaper and faster to solve problems	• The project team should well prepared • Concessions should be made sometimes		X
Personal past experience	• Clear understanding about the previous stakeholders • Saves time for consultations	• May have cognitivelimitations • Can be useless due to the unique nature of projects	X	
Professional services	• Provide complete plans for stakeholder management • Saves time for project managers	• Can be costly • May have a bias on the project	X	

Questionnaire and surveys	• Respondents' anonymity can encourage more honest answers • Can reach respondents who are widely scattered or live considerable distances away • Provides information for those unlikely to attend meetings and workshops • Allows the respondent to fill out at a convenient time • Provide larger samples for lower total costs	• Low response rates can bias the results. • Care must be taken that the wording of questions is unambiguous to prevent skewed results • Care is needed in sampling to make sure representative samples are taken • Information gathered can be superficial	X	
Workshops	• Ideal for looking at specific issues • Excellent for discussion on criteria or analysis of alternatives • Offers a choice of team membersto answer difficult questions • Builds ownership and credibility for the outcomes	• Not a totally individualized discussion • Needs to be well facilitated by credible individuals who have the interpersonal skills to deal with challenging issues • If actions not followed through can destroy trust	X	X
Social contacts	• Build trust with stakeholders • Maximizes two-way dialogue	• Only suitable for some stakeholders • Requires creativity and resource investigation to reach a large number of people		X

Figure 2. 13: Approaches for stakeholder analysis and engagement in construction (Yang et al., 2011)

2.10 Tools and techniques for stakeholder management

There are methods and instruments for managing and involving stakeholders in construction projects. The design charrette, contingent valuation approach, Delphi technique, strategic needs analysis, and stakeholder cycle are just a few of these. The following is a list of the subjects that will be covered.

2.10.1 Design charrette

A series of workshops called a charrette are organized at the pre-design stage of a project to gather and incorporate the interests and contributions of the project stakeholders. The purpose of the charrette is to understand all design-related issues from the stakeholders' perspective and to create solutions. In order to guide the project's final design, these solutions are presented in a report format (Odjelua & Adjei Kumi, 2021). The charrette, could take some time, depending on the project's size and complexity, the stakeholders' comprehension, and the resources available. A design charrette could last for two days or even longer. For charrette sessions to be successful, some personnel and material resources are needed, such as a facilitator, a session agenda, a project description and/or brief, a site layout (Isa, Alias, & Abdul Samad, 2014). The effectiveness of the charrette depends heavily on the function of the facilitator, who is often not part of the design process. Members of the design team,

project owners or appropriate representatives, representatives of pertinent interest groups, users/occupants if not the owners, and any required specialists should attend the design charrette.

2.10.2 Contingent value method

The assets and infrastructure monetary value that cannot be traded on the open market can be determined using this method, which is well-known in environmental economics and urban planning. The organization and its stakeholders are intended to become more closely involved through the capture of the total economic value (TEV), which is made up of the project's direct use value (DUV) and non-use value (NUV). The NUV denotes the value that cannot be measured by market prices, such as asset existence value and future usage potential. The DUV measures market value, including usage fees, nearby property value, and third-party users who benefit from the facility without directly subsidizing it. The finding is that the total economic value (TEV) is the product of the DUV and the NUV. From here, there are two ways to determine the project's worth from the users' point of view. Users' willingness to pay (WTP) is evaluated prior to the project's launch, but their willingness to accept (WTA) is evaluated afterwards. WTA evaluates the user's willingness to accept the project's facility or service in exchange for a reduced price, while WTP measures the user's willingness to pay for the project's service (Portney, 1994).

The following are the foundational steps of the CVM:

1. The setting up of a hypothetical market
2. Attaining bids

According to Fontana et al. (2019), this has been employed to obtain support from project stakeholders for infrastructure construction projects and has shown to be an imperative tool, particularly for communicating with them and winning their support early on in the project, when the choice to make investments is being made.

2.10.3 Delphi technique

It is a technique for gathering opinions and interests from stakeholders in the creation of project design concepts. Promoting communication and engagement among project participants helps to include stakeholders' interests by representing a variety of interest groups from various disciplines and backgrounds. The Delphi process typically consists of three rounds (Figure 2.14), each of which includes a unique group of

participants (Orndorff, 2005). Participants (stakeholders) who have been adequately instructed on what is expected of them and what is being asked of them in each round (survey instrument) are given the same set of questions. The goal of the Delphi method is normally to generate a proposal for the project that is being constructed that is either a consensus or completely new (alternative). The construction sector has made investment decisions using the Delphi Technique (Orndoff, 2005).

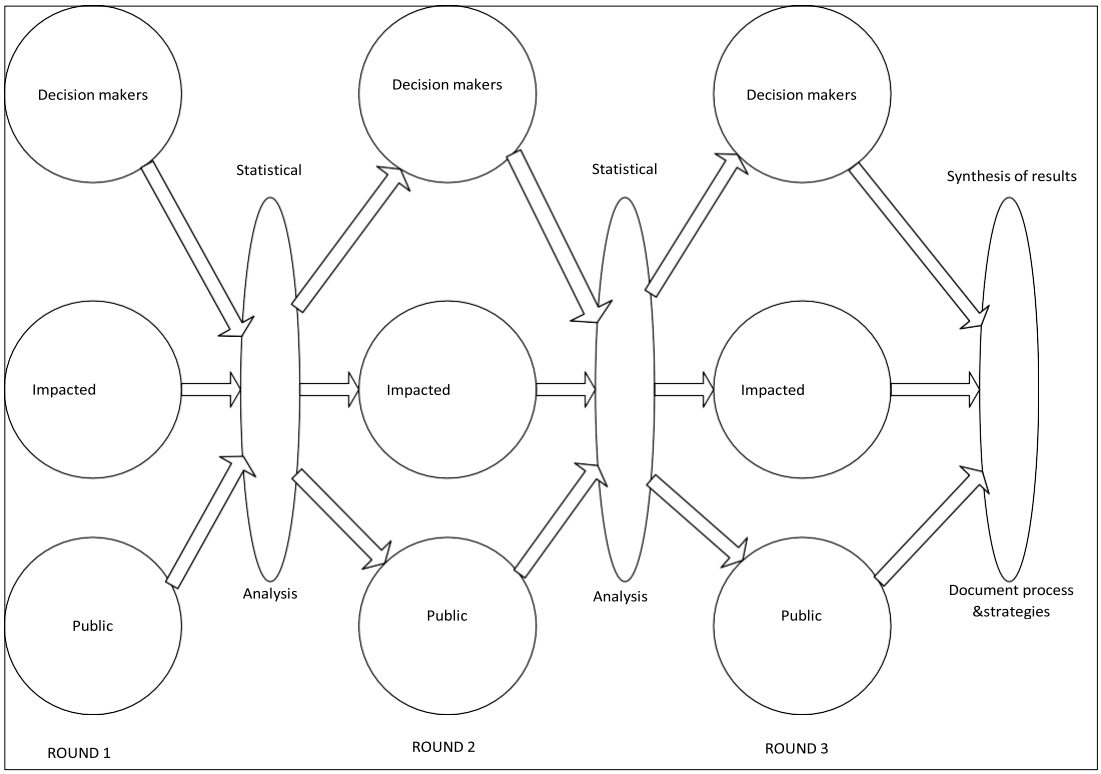


Figure 2. 14: Diagram of Delphi Technique process (Orndoff, 2005)

2.10.4 Strategic needs analysis

According to Eskerod and Huemann (2013), the strategic requirements analysis entails using workshops and seminars to gather data about stakeholders' project needs and analysing them with software (strategizer) to determine the best plan. The five main steps of the process for conducting a strategic requirements analysis are shown by Smith and Love (2004). These steps are as follows:

1. Gathering information to better comprehend the problem's nature (preliminary information seminar);
2. (Stage two, workshop one) Discuss and analyze the problem ;
3. Develop problem-solving options (stage two, workshop one);
4. Select an ideal option (stage two, workshop two); and

5. Encourage the decision to be carried out in light of the workshop's activities (stage two, workshop two).

Smith and Love (2004) looked at how strategic requirements analysis may be used during the briefing stage to involve stakeholders in the creation and provision of a number of strategic options for a suggested project. According to Smith and Love (2004) stakeholder management is useful when projects are just getting started. However, they overlooked the necessity for process sustenance and continuity that was present in the example studied. Concerns voiced by various stakeholders at subsequent stages of the case project suggest that the notion that it is sufficient to resolve stakeholder-related issues once some stakeholders have engaged in the briefing stage leading to the project's final decision may be incorrect.

2.10.6 Public hearing

Stakeholders can come together at a public hearing to discuss their points of view, bargain over competing interests, and identify shared objectives. In establishing the rights, obligations, and processes for project, decision-making is also helpful (Rowe & Frewer, 2005: 251-290). Even though it has been demonstrated that stakeholder involvement benefits from public hearings, they can be problematic if not handled properly. All significant project stakeholders, including members of the public, are asked to take part in discussions which are made open where ideas are freely and methodically shared and incorporated into the project's ultimate design. This is mostly applied to projects of public interest (Li,Ng & Skitmore 2018).

2.11 Chapter summary

This chapter defines the term stakeholder, stakeholder types, stakeholder management in the construction projects, crucial success factors in stakeholder management process, and stakeholder assessment. Realistic stakeholder involvement and analysis strategies are also covered. A useful technique for figuring out how stakeholders will effect a project is to evaluate them based on their traits (attitude, best interest, power, legitimacy, urgency, closeness, and expertise).

There are many practical tactics that may be employed in the stakeholder management process, according to prior research, but their effectiveness depends on the type of project, the stakeholders' analysis, and the goal that the project manager is trying to accomplish.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The major aim of this study was to look into stakeholder management in construction projects in the Western Cape, South Africa. The theoretical foundation of the topic under investigation was described in the preceding chapter. This was communicated by bolstering the pre-existing beliefs with pertinent literature so as to substantiate the study's main goals.

The methodology and research plan used to achieve the study's goals are covered in this chapter. The research topic for the study are described and the researcher discusses the demographic and sample methodologies, data gathering and analysis, and ethical considerations used in the study.

Merriam (2014:3) defines research as an organized, methodical investigation into or examination of anything. The same word was well-defined by Tranfield et al. (2003:207) as "the process of utilizing scientific methods to widen knowledge in a certain study area." The research design and methodology are crucial to the success of the research when doing it (Khan, 2011:69; Kumar, 2008:30; Mills & Birks, 2014:13).

It was necessary to establish research objectives, which indicated what the research needed to achieve, as well as research questions, to provide more information on the topic at hand, and enhance the understanding of stakeholder management in construction projects.

3.2 Research questions

Punch (2009:5) argues that the organizational principle of the report and the basis of experiencing processes are the research questions. In this study, it was crucial to establish questions for research because they served as a roadmap for attaining the study's goals. The research questions that guided this study were:

- What are the typical stakeholders found in construction projects?
- Who are the most important stakeholders based on their impact on the project?
- What are the factors affecting the stakeholder management process in construction projects in Western Cape?

3.3 Research objectives

The goal that researchers hope to achieve when they perform a study is stated in research objectives (Creswell, 2012:4; Ivankova, 2014:105). For a study to be effective, it is essential to establish research objectives since they serve to direct the researcher through the research process and assist them to accomplish their purpose (Ivankova, 2014:105). In order to evaluate the study's findings, it was essential to create research objectives.

The following objectives were pursued so as to fulfil the study's intended purpose:

- To identify the diverse stakeholders and their interests in construction projects.
- To rank stakeholders according to their impact in construction projects.
- To identify the most important factors in the construction project affecting the process of stakeholder management.

3.4 Research design

In Mouton's words (2006:107), a research design is, "a set of rules or instructions that describes the methods and procedures for collecting and analysing data." Study design, as Mouton notes, can also be thought of as a strategic framework for guaranteeing that the data acquired is relevant for addressing or working on the research issue. According to Burns and Bush (2005:104), there are three categories of study designs which is exploratory, descriptive, and explanatory. In this modern investigation, the researcher employed both an exploratory and a descriptive research design.

3.4.1 Descriptive research design

According to Nykiel (2007:56), descriptive design allows for the generalization of sample results, which is critical for validity and reliability. Validity refers to "how well the experiment measures what it claims to measure, whereas reliability refers to the stability or consistency of the experiment's outcome." According to Burns and Bush (2005:110), the following research questions are addressed using a descriptive design: who, what, where, when, and how. In consensus with Burn and Bush (2005:110), the researcher employed the descriptive design. Firstly, the researcher began by locating and identifying employees who are directly associated with various construction project firms in the Western Cape of South Africa. Secondly, the researcher described the extent to which stakeholders are managed in construction

projects using principles of project management. Thirdly the researcher gathered and described the demographics of the respondents; and, finally the researcher pinpointed the most crucial project elements influencing the stakeholder management process.

3.4.2 Exploratory research design

Babbie and Mouton (2010:80) are of the opinion that, exploratory research design aids the researcher to have a better understanding of a subject. Similar to Babbie and Mouton (2010:80), exploratory design, which entails employing project manager interviews, allowed the researcher to have a better understanding of the whole phenomenon. Furthermore, Babbie and Mouton (2010:80) offer the analogy that exploratory design entails taking care of respondents who have prior expertise and knowledge of the subject being studied. The researcher interviewed project managers from a selected construct project firm and this action was in line with studies by (Babbie & Mouton, 2010:80). The research problem, objectives, questions and significances of the study were in cooperated in the interviews resulting to the following benefits:

- Using exploratory research techniques increased the likelihood to produce reliable, valid research findings.
- The research techniques, made it simpler to present facts accurately and truthfully. Adopting this techniques provided elimination of biases
- .Exploratory research formulated a greater understanding of previously unsearched topic and satisfies the researcher uncovers facts and brings new issues to light. In doing so, it helped refine the future research questions. It also helped on deciding the best approach to reach the objective.
- Another benefit realised, exploratory research is its qualitative data and subsequent analysis. It is difficult to derive accurate insights that can be summarized in an objective manner. The variability in qualitative data itself makes the evaluation of data collected, a difficult and cumbersome process.

3.4.3 Research methodology

The methodology of research is described as a way of addressing the research challenge in a methodical manner (Kothari 2004:8). It is a systematic process in which the researcher starts with the problem identification and moves on to the conclusion stage. It includes general tasks like problem identification, literature reviews, research questions formulation, data collection and analysis, result interpretation, and

conclusion drawing (Singh, 2010:156). Babbie and Mouton (2010:75) agree that the methodology of research reveals the methods of research approaches that are appropriate in a study. Both quantitative and qualitative research approaches were selected as the most appropriate for this thesis in accordance with Babbie and Mouton (2010:75). Due to time constraints, both approaches were successfully run concurrently and are discussed below.

3.4.3.1 Qualitative research methods

According to Polonsky and Waller (2011:134), qualitative research methods focus on eliciting the participants' thoughts and feelings in order to fully comprehend the subject before forming a conclusion. In fact, it generally involves small groups of people who offer the researcher detailed information. In line with Polonsky and Waller (2011:134), the researcher used interviews supported by the interview guide (Appendix E) to gather data from a small group of people to completely understand the subject before coming to a conclusion, placing emphasis on eliciting the participants' opinions and feelings. Similar to Polonsky and Waller (2011:134), Denscombe (2007:286) states that qualitative research is characterized as the use of verbal or written words, as well as visual images, interviews, documents, and observations. Thomas (2003:1) agreed that the goal of qualitative research is to describe the characteristics of individuals and social contexts. He concurs as well that qualitative researchers do not evaluate occurrences using quantitative data to compare them. Additionally, the researcher uses qualitative research because, in accordance with Babbie and Mouton (2009:270) “qualitative research involves a process that is undertaken in the natural environment of social actors, focusing on the process rather than the outcome, and emphasizing the actor's point of view." By allowing participants to openly express their thoughts on a subject, qualitative research encourages them to delve deeper into their knowledge and experiences. Interviews with project managers were performed to ascertain their opinions on and experiences with the management of stakeholders in construction projects. The interviews helped determine a number of things:

- To comprehend the various stakeholders' varied interests in construction projects.
- To comprehend the relative importance of stakeholders in construction projects.

- To appreciate the most important factors in the construction project affecting stakeholder management process.

There are several restrictions with qualitative approaches despite the fact that they enable the researcher to collect a greater range or deeper levels of data from the respondent.

It is not always possible to generalize the findings because of the limited sample size and it is also conceivable that the participants do not fairly represent the overall population. Additionally, because interpretations are subjective rather than objective, conclusions might occasionally be open to bias because they depend on the researcher's interpretation. Consequently, the researcher also used a quantitative approach to make sure the results are typical of the greater community.

3.4.3.2 Quantitative research method

The quantitative approach of this study seeks to gather factual and statistical information on stakeholder management in building projects. Any study that allows the researcher to count the number of respondents who agree or disagree with a proposition is considered quantitative research, but it is unlikely to offer insight into why respondents provided the responses they did (George 2011:117). According to Nykiel (2007:55), the key advantages of quantitative research are that it produces statistically valid results and that the conclusions may be projected to the whole population. Validity is defined by Levy and Lemeshow (2013:25) as how exact an approximation can be, whilst reliability is defined as how repeatable the results are. This means that reliability is concerned with the results' consistency over time (Golafshani, 2003:598).

Quantitative research techniques allow the researcher to be more involved and impartial while reporting on social phenomena (Babbie & Mouton (2010:263). To do so, the researcher used closed-ended questionnaires that were given to project department members.

The researcher created a thirteen-paged survey in the form of a funnel (Appendix D). The first section of the questionnaire was made to use demographic information to profile respondents. The second component covered the stakeholders that are found and their interest in construction projects. According to their influence on the project, the third component concentrated on the key stakeholders. The fourth part

concentrated on the crucial elements that affect stakeholder management in building projects. An attached cover letter gently authorizing responders' involvement was included with the questionnaire (Appendix A). In a section of the questionnaire that used a 5-point Likert scale, respondents had to choose the response that best reflected their opinion of each statement, ranging from (1) strongly disagree to (2) disagree to (3) neutral to (4) agree to (5) strongly agree. Leading statements were used in this section. According to Emory and Cooper (1995; cited in Bruwer, 2010:31), the Likert scale was selected because it is simple and quick to create and, more significantly, it provides more information and is more trustworthy.

3.5 Population under study

Oliver (2004:127) defines "population" as the sum of individuals who will be impacted by the study's findings. The entire population to which the survey's results should be applied is referred to as the "population," (Levy and Lemeshow 2013:11). Kothari (2004:41) defines the research population as the larger group from whom study participants are selected. The target population for this study included stakeholder management teams with experience working in the construction industry, project managers working on construction projects, and project teams. These individuals were found in a database, and their considerable project development expertise was used to choose them. The Western Cape Province was therefore represented by one larger construction organization in the Cape Town Metro Municipality Area.

3.6 Sample frame

Oliver (2004:127) argues that while it is occasionally possible to gather data from the entire population through sampling, it is never usually practical, particularly when the population is too big, geographically dispersed, or the precise number of people in the population is unknown. Bryman (2004:87), suggest that targeting the entire population of a study is highly difficult, time-consuming, and expensive and therefore suggests using a sample frame in research. A sampling frame is a list of individuals from the population who will be sampled. The sample frame for this study was based on employees working in the project management division in a construction project company.

3.7 Sampling methods

A sample, which is a portion of the population, provides an accurate representation of the complete population. The two fundamental sampling techniques that are the easiest to understand are probability and non-probability sampling (Levy & Lameshow, 2013:14). In this study, deliberate non-probability sampling was performed. According to Adler and Clark (2010:123) and Blumberg, Cooper, and Schindler (2011:167), respondents are chosen for the study based on their traits, histories, opinions, or perceptions. In line with Blumberg, Cooper, and Schindler (2011:167) and Adler and Clark (2010:123), the researcher selected construction project firms, project managers, and project management teams in the Western Cape. More specifically, the researcher chose permanent employees in the project management departments of construction companies. These individuals were picked according to their expertise and experience with the selected issue.

3.8 Pilot study

Welman, Kruger, and Mitchell (2012:148) express that, a pilot study is a method that involves giving an instrument to a small group of participants from the same population in order to check for potential flaws like murky instructions, potentially incorrect wording, and grammatical errors as well as to evaluate validity and reliability. According to Cargan (2007:116), a pilot study is intended to solve the following difficulties:

- To see if there are enough instructions for individuals administering the survey to collect, code, and submit the data?
- To evaluate if procedures are summarized?
- To check if the required data is being provided?
- To screen if the survey's questions are appropriate for the participants?
- To assess if the data being collected is reliable?

The questionnaire was randomly sent to the Cape Peninsula University of Technology's Project Management Department employees and students. There were ten surveys and five of the surveys were given to lecturers at random, while the remaining five were sent out to post-graduate students in a similar way. The time required by respondents to complete the survey, the questions' applicability to the matter at hand, the study's objectives, and any suggestions or criticisms were all taken

into account by the researcher. The supervisor provided guidance on how the statements could be adjusted and the questionnaire was refined based on input from the pre-tested sources and deployed in the field to gather primary data. The same approach was applied in relation with interviews, where eight experts from the subject under research were randomly selected from different construction companies to assess the interview questions and the process itself advise to ensure validity.

3.9 The Quantitative data collection and analysis

The process of acquiring data using either humans or machines is known as data collection (Dorsten & Hotchkiss 2005:30). Subsequently a survey is a reasonably quick, cheap, effective, and accurate way to learn about a community, it should be utilized to gather quantitative (questionnaire) data in a study. For data gathering, the researcher gave out questionnaires to participants for a six-week period. In terms of qualitative techniques, the IBM Statistical Package for the Social Sciences was utilized to record and evaluate data gathered through questionnaires, while content analysis was used to look at the information from the questionnaires.

3.10 The Qualitative data collection and analysis

According to Mugobo (2013:206) data collection and analysis are parallel tasks in a qualitative research, which is consistent with Bryman and Burgess (1999:4).On the same note Mugobo (2013:207), assert that qualitative data should be presented in the manner described by Miles and Huberman (1994:9) :first, giving the data a code; second, identifying the trend, themes, phrases, sub-group, and the order ; third, identifying similarities and differences; and finally, developing a set of generalizations. The information from these interviews was thoroughly analysed by the researcher, and it was organized into topics. The researcher recognized the themes' similarities and contrasts, and the data was objectively analysed and interpreted.

3.12 The Reliability and validity

3.12.1 Reliability

The ability to trust or rely on the accuracy of the data in a research study is known as reliability (Nykiel, 2007:27). Additionally, it is described as a way in which generated results may be applied to various measuring contexts and tests (Welman & Kruger 2001:139). To ensure the validity of the study, five of the questionnaires were distributed at random to lecturers, and the remaining five were distributed to post-

graduate students to finish in a similar manner. The researcher took into account the length of time needed for respondents to finish the questionnaire, the questions' relevance to the subject, the objectives of the study, and any criticisms or suggestions for improvement- and on the other hand, Cronbach's alpha was used. According to Chan and Idris (2017) by comparing the amount of shared variation, or covariance, among the items that make up an instrument to the amount of overall variance, Cronbach's alpha is a method for evaluating reliability. Reliability testing was done through Cronbach's alpha on the pilot study's responses for section B, C and D of the questioner. According to Creswell (2014) there are certain rules of thumb that apply to Cronbach's alpha values that can be considered reliable. Creswell (2014) states that the closer the value is to 1 the better, with values greater than 0.9 being very good and those above 0.7 being acceptable and those from 0.6 and 0.5 being questionable and poor respectively.

3.12.2 Validity

Findley, Kikuta and Denly (2021) describe validity as "legal and governmental acknowledgement of the data" in the research. The validity of scientific discoveries is all about their veracity and accuracy. In several research studies, the words credibility, trustworthiness, truth, value, application, and consistency have been used in place of validity. These studies include those by Lincoln and Guba, (1985), Leininger (1991), Glaser and Strauss (1967).

The validity of the study was achieved through the endorsement of the Cape Peninsula University's Higher Degree Committee, which guaranteed that the study was genuine. Also, the supervisors helped by double-checking the literature for research difficulties, research questions, and data gathering methodologies.

3.13 Ethical consideration

It is critical for the researcher to be conscious of any applicable ethical considerations when doing research. Walsh and Wigens (2003:106) note that in order for a research study to be successful, ethical factors such as participant rights protection, potential risks associated with questioning, and the idea of voluntary participation must be taken into account. The value of participant confidentiality cannot be overstated. Any information shared by participants should be guaranteed. Walsh and Wigens (2003:106) note that in order for a research study to be successful, ethical factors such

the preservation of participant rights, potential risks associated with questioning, and the idea of voluntary participation must be upheld. It is impossible to stress how important participant confidentiality is. Participants should be given the assurance that any information they share with the study will not be disclosed to anybody else (Verhoef & Hilsden, 2004).

Certain questions may have the potential to create unstable emotions. The researcher must make certain that the questions provided to respondents do not elicit strong emotions or anxiety (Walsh & Wigens, 2003:106). Voluntary participation involves a non-use of coercive measures to respondents or bribed to take part in a study.

The study ethics committee at CPUT required the drafting of letters asking for participation, which were mailed to the participants to obtain their approval to conduct the study. Respondents were given advance notice of the study's purpose and were not pushed or pressured into participating (Appendix F).

Participants received assurances that their information would be treated confidentially, that non-disclosure would be maintained, and that no personal information about them would be made public. Finally, the findings were documented and presented truthfully, without deceiving people or misrepresenting natural realities.

3.14 Delineation of the study

While delimitations show how the studies' scope was restricted to a particular subject rather than adopting a systemic approach, limitations explain weaknesses in the analysis (Collis and Hussey 2013).

- As much as stakeholder management applies to a comprehensive range of sectors and project forms, the research focused only on construction project companies and how they handle stakeholder management. These companies are located only in the Western Cape.
- The study's main objective was to ascertain the level of stakeholder management in construction projects in the Western Cape region of South Africa.
- The only participants in the study were those working in the project management departments of construction companies in the Western Cape region of South Africa.

3.15 Chapter summary

The chapter covered the study techniques utilised in the research, stressing the reasons that led the researcher to choose the research instrument over alternative techniques. Population and sample size, study validity and reliability, ethical considerations, quantitative and qualitative research methodologies, and data analysis were all taken into account. The study's analysis and presentation are presented in the next chapter.

CHAPTER FOUR
DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Introduction

The study approach and the methods utilized to answer the study's questions were covered in chapter three. The analysis and interpretation of the research study's empirical findings are presented in this chapter. Data presentation and analysis are carried out to determine what can be saved for the real study and what can be eliminated (Brynard and Hanekom (2014:62). Filtering away unneeded data is the initial phase in the data analysis process, which is then followed by data reduction and further data reduction. According to Zikmund et al (2013:648) making sense of massive amounts of data is known as data discussion. The IBM Statistical Package for Social Scientists (SPSS) version 26 was used to analyze quantitative data. Additionally, the researcher employed graphs, tables, charts, and figures to portray data in a way that was simple to understand. Thematic and narrative analysis have been technically employed in this section in order to supplement the obtained data. The results were examined and analysed in light of the study's objectives.

4.2 Section A: Demographics

4.2.1 Response rate for questionnaire respondents

Due to Covid -19, it took the researcher 6 weeks to hand out 100 questionnaires to staff members who were working in project departments, giving respondents a lot of time to read and deliberate before responding. Only 86 out of 100 of the questionnaires were completed and collected by the researcher, who started collecting them in the eighth week. The researcher distributed and gathered all of the surveys over the course of eight weeks. Table 4.1 present the response rate.

Table 4. 1: Response rate for questionnaires

Sector	Questionnaire distributed	Questionnaire completed and collected	Response rate %
Construction employees	50	47	94.0%
Project managers	20	16	80.0%

Project management teams.	30	23	76.7%
Total	**100**	**86**	**86.0%**

The response and response rate are displayed in Table 4.1 above Zikmund et al (2013:648) claim that "there is no generally agreed norm as to what is or what may not be perceived as an acceptable and reasonable response rate". However, Saunders, Lewis, and Thornhill (2015) note that 50% is the lowest rate of response. As a result, the average response rate for the study, which is 86%, is higher than the minimum allowed rate.

4.2.2 Reliability of the research instrument

Reliability testing was done on the pilot study's responses for section B, C and D of the questioner. Form table 4.2, Section A (The demographics) was omitted since the responses were not lickert scale data and therefore reliability could not be determined for them. According to Creswell (2014) there are certain rules of thumb that apply to cronbach`s alpha values that can be considered reliable. Creswell (2014) states that the closer the value is to 1 the better, with values greater than 0.9 being very good and those above 0.7 being acceptable and those from 0.6 and 0.5 being questionable and poor respectively. The outcomes are shown in table 4.2 below.

Table 4. 2: Cronbach's alpha index

Section	Valid cases (N)	No. of Items	Cronbach's alpha coefficient	Comment
B	86	40	0.921	Internally reliable
C	86	38	0.883	Internally reliable
D	86	52	0.790	Internally reliable
		130	**0.865**	**Internally reliable**

Cronbach's alpha coefficient measures the internal consistency, or reliability, of a set of survey items. Use this statistic to help determine whether a collection of items consistently measures the same characteristic. Cronbach's alpha quantifies the level

of agreement on a standardized 0–1 scale. The results indicate that **Section B** items had Cronbach alpha index of 92.1% while **Section C'**s 38 items had 88.3%. Lastly **Section D** had 79%. These findings illustrate that the questionnaire was reliable. The 130 items' dependability was 0.865, greatly exceeding the required minimum of 0.7. (Krishnan & Ramasamy, 2011). These findings suggest that the questionnaire findings could be taken for further analysis.

4.2.3 Demographic data analysis

The questionnaire used in the study is structured in four sections. In section **A** respondents' demographic data was covered, while Section **B** covered stakeholders that are found and their interest in construction projects. The first section showed the demographics of the study participants. Section **C** deals with the question of who are the most important stakeholders based on their impact on the project. The most important elements influencing stakeholder management in construction projects were the subject of Section **D**.

4.2.4 Demographic data of respondents

4.2.4.1 Gender

For clarity's sake, Figure 4.1 demonstrates the frequency distribution of respondents by gender.

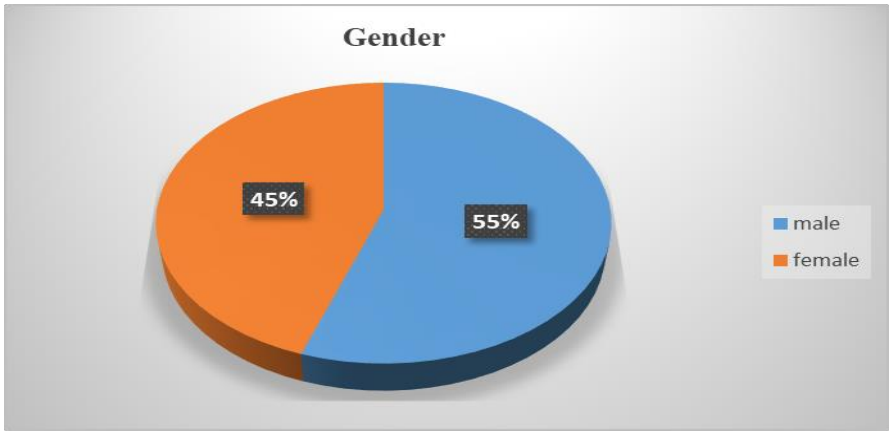


Figure 4. 1: Distribution of respondents by gender

Figure 4.1's findings suggest that 45% of the study's respondents were female, whereas 55% were male. The majority of the participants were male. These findings provide additional evidence that the construction industry is male dominated despite the fact that female presence is increasing.

4.2.4.2 Age

The distribution of research participants by age is shown in Figure 4.2

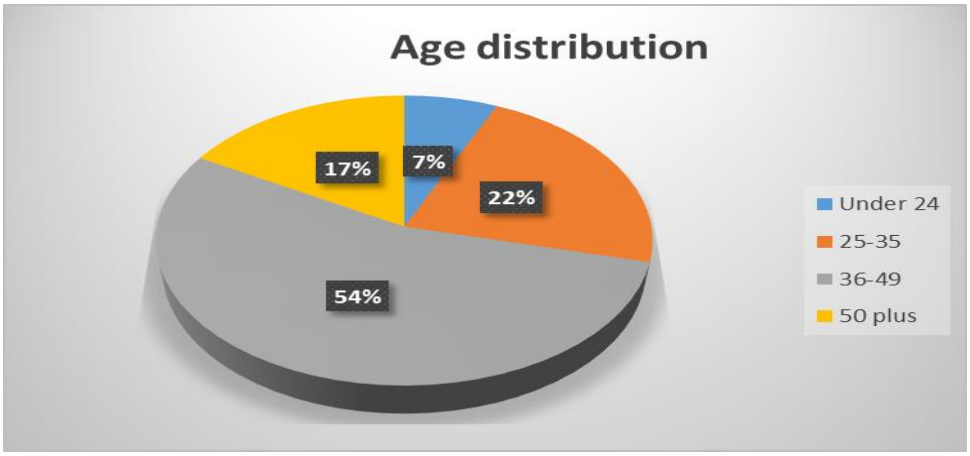


Figure 4. 2: Age distribution

Figure 4.2 provides an overview of age working force, where 54% of respondents were between the ages of 36 and 49, while only 7% of those under the age of 24 participated which the lowest percentage for the study was.

4.2.4.3 Education

The distribution of research participants by educational levels is shown in Figure 4.3

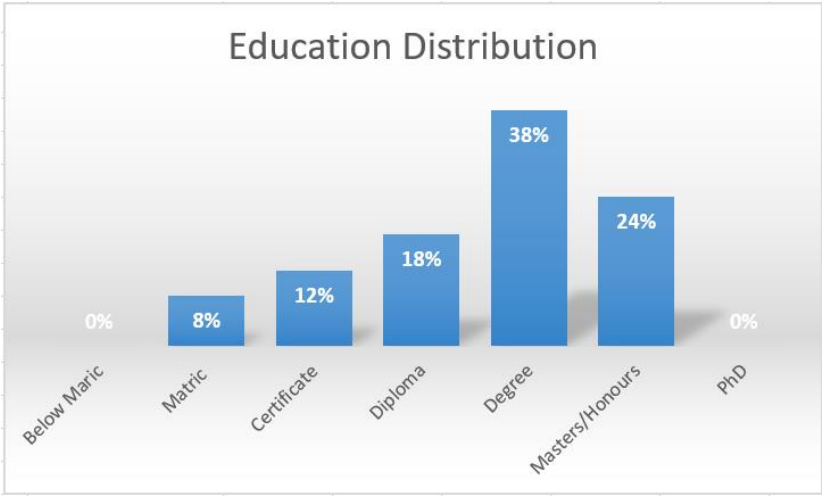


Figure 4. 3: Education distribution

The findings from Figure 3.4 provide an overview of the level of education where the majority 38% hold degree followed by 24% holding a master's degree. It is also revealed that 8% is in possession of matric, where 12% hold certificates and the other 18% of the participants hold diploma. The findings also show that none of the

participants held either a PhD degree or are below matric. These findings also provide evidence that many employees have received formal education, which aids in their job performance and helps them see the value of cooperating with stakeholders.

4.2.4.4 Race

The distribution of research participants by race is illustrated in figure 4.4 below.

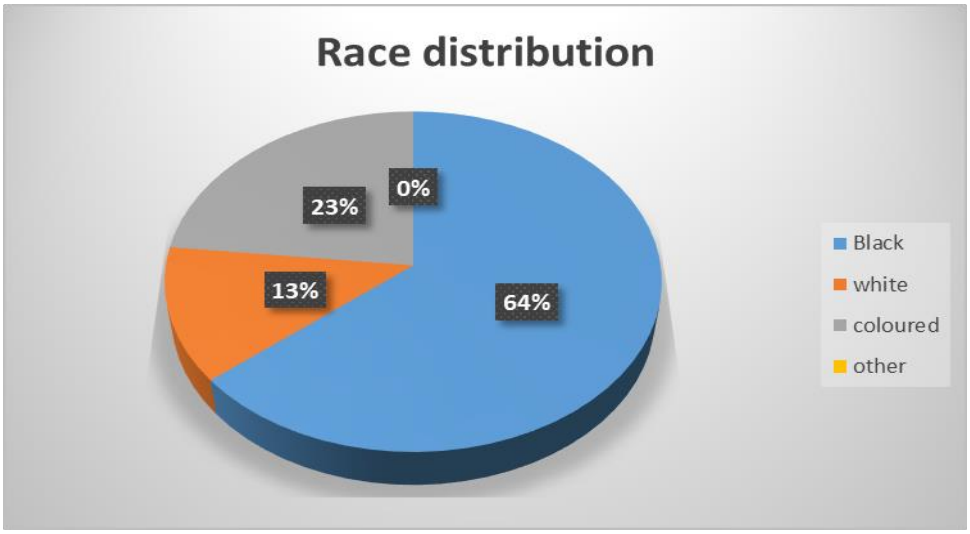


Figure 4. 4 : Race distribution

The findings shows that many of the participants are blacks (64%) followed by coloured which make up the 23%. Only 13% of the respondents are white. The findings above illustrate that many black individuals predominate the sampled construction companies in the Western Cape. This can be owed to the fact that the native inhabitants of South Africa are black people.

4.2.4.5 Working industry

The distribution of research participants by working industry is illustrated in figure 4.5.

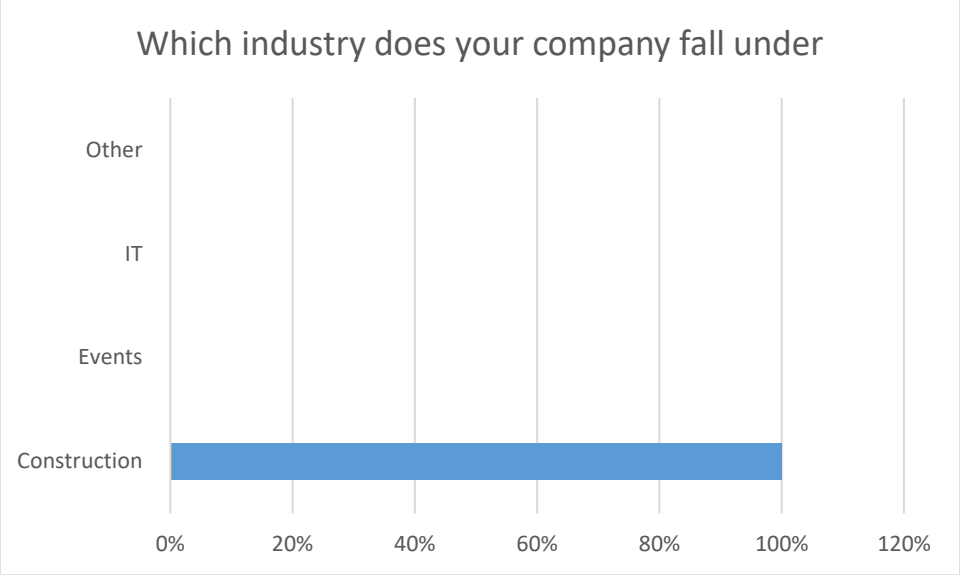


Figure 4. 5: industry distribution

Findings illustrated in figure 4.5 indicate that 100% of respondents confirmed working in the construction industry. The 100% is derived from the 86 out of 100 completed questionnaires received and collected by the researcher. This means everyone participated in the study work in the construction industry. This also shows that the researcher managed to get the targeted population accurately, and the benefit of this study is also realized.

4.2.4.6 Number of employees involved in a project

The frequency distribution of respondents by the number of employees involved in a project is shown in Figure 4.6.

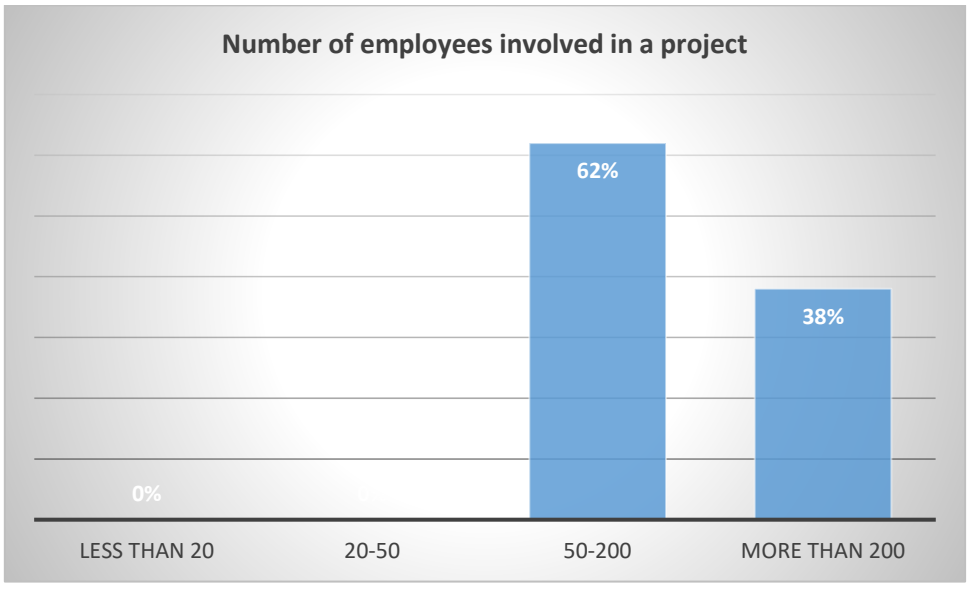


Figure 4. 6: Figure. Number of employees involved in a project

Findings interpreted in figure 4.6 show that the majority of 62% of respondents believes that employees who are directly involved in a project are 50–200 employees, while 38% are of the view that employees who are directly involved in a project are more than 200. None of the respondents had a view from the employees who are involved in a project less than or between 20 and 50.

4.2.4.7 Experience

The frequency distribution of respondents according to their experience is shown in Figure 4.7 below.

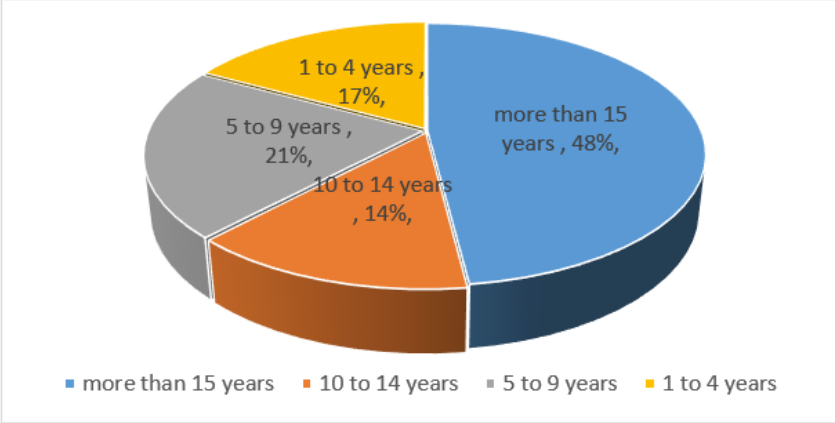


Figure 4. 7: Distribution experience

Findings shown in figure 4.7 show that 48.0 % of the study's participants have more than 15 years of experience working on construction projects, followed by 21% with between 5 and 10 years of experience. Furthermore, it was found that 17% of workers in the construction sector had fewer than five years of experience, and 14% had between ten and fifteen years.

4.3 Section B: Stakeholders that are found and their interest in construction projects.

The results of the descriptive analysis, which was aided by the study instrument, are illustrated in this section, see the Appendix D.

4.3.1 Project definition-related attributes

The first part of Section B asked for information on the significance of the chosen project definition-related characteristics for the effectiveness of stakeholder management. The outcomes are shown in table 4.3 below.

Table 4. 3: Project definition-related attributes

	Excellent project feasibility study	Clearly stated project objectives	Good project location	Detailed design	Resisting project scope changes	Clearly stated stakeholders needs	Project Planning and Control
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
disagree	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
neutral	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	0.0%
Agree	9.3%	2.3%	9.3%	5.8%	36.0%	9.3%	5.8%
Strongly agree	90.7%	97.7%	90.7%	94.2%	55.8%	90.7%	94.2%

Source: SPSS Output (2022)

Table 4.3, shows that after the respondents were asked pertaining asked for information on the significance of the chosen project definition-related characteristics for the effectiveness of stakeholder management all of them agreed to the questions asked. Therefore the total proportion of those who agreed on this particular topic was 100%.

4.3.2 Early Stakeholder Identification and successful stakeholder management

The second section of Section B requested data on how important early stakeholder identification is to ensure successful stakeholder management. The outcomes are shown in table 4.4.

Table 4. 4: Early Stakeholder Identification and successful stakeholder management

	strongly disagree	disagree	neutral	agree	strongly agree
Stakeholder identification occurs at the project definition stage	0.00%	0.00%	0.00%	39.50%	60.50%
Identify stakeholders at the design stage	0.00%	0.00%	0.00%	55.80%	44.20%

Identify stakeholders at the tender stage	1.20%	51.20%	20.90%	25.60%	1.1%
Having an expert staff to identify stakeholders	0.00%	0.00%	0.00%	39.50%	60.50%
Identify stakeholders at every stage	0.00%	0.00%	0.00%	48.80%	51.20%
All interested parties are identified before project design sign off	0.00%	0.00%	0.00%	55.80%	44.20%
Excluding all late stakeholders	1.20%	12.80%	16.30%	40.70%	29.10%
Reviewing an existing stakeholder list	0.00%	0.00%	0.00%	39.50%	60.50%
Having a directly designed register	0.00%	0.00%	0.00%	9.30%	90.70%

Source: SPSS Output (2022)

In reference to table 4.4, the research`s findings show that the merged proportions for those who agreed were 100%, 100%, 26.7%, 100%,100%, 100% 69.8%, 100% and 100%. These proportions were for stakeholder identification occurs at the project definition, Identify stakeholders at the design stage, Identify stakeholders at the tender stage, having an expert staff to identify stakeholders, Identify stakeholders at every stage, all interested parties are identified before project design sign off, excluding all late stakeholders, reviewing an existing stakeholder list and having a directly designed register respectively. The proportions for those that were rather neutral on the issues were 20.9% and 16.3% for Identify stakeholders at the tender stage and excluding all late stakeholders, respectively. The merged findings for those who disagreed were 52.4% and 14% for Identify stakeholders at the tender stage and excluding all late stakeholders, respectively.

4.3.3 Methods of identifying stakeholders

The third section of Section B requested data on the methods used in identifying stakeholders. The results are displayed in Table 4.5 below.

Table 4. 5: Methods of identifying stakeholders

	Personal experience	Interviews	Brainstorm	Geographically	Workshops	Project meeting	Involvement
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

disagree	0.0%	25.6%	0.0%	0.0%	0.0%	0.0%	1.2%
neutral	0.0%	36.0%	0.0%	0.0%	3.5%	1.2%	11.6%
agree	39.5%	37.2%	2.3%	2.3%	43.0%	39.5%	38.4%
strongly agree	60.5%	1.2%	97.7%	97.7%	53.5%	59.3%	48.8%

Source: SPSS Output (2022)

In reference to table 4.5, the research`s findings show that the merged proportions for those who agreed were 100%, 38.4%, 100%, 100%,100%, 96.5%, 98.8% and 87.2%. These proportions were for Personal experience, Interviews, brainstorm, geographically, workshops, project meeting and involvement respectively. The proportions for those that were rather neutral on the issues were 36%, 3.5%, 1.2% and 11.6% for Interviews, workshops, project meeting and involvement respectively. The merged findings for those who disagreed were 25.6% and 1.2% for Interviews and Involvement respectively. The empirical findings suggest that construction companies use a variety of methods to identify stakeholders.

According to Eskerod and Jepsen (2013) and Jepsen and Eskerod (2009), stakeholder identification happens at every level. In agreement with these findings, Eskerod and Huemann (2013) assert that gathering information about stakeholders' project needs, involves holding workshops and seminars as part of the strategic stakeholder requirements analysis. These findings are also consistent with earlier research. As an illustration, Yang et al. (2011) advise project managers to choose techniques that are suitable for the stakeholder management process. A further additional observation or argument from them is that there is no such thing as a stand-alone approach. Li et al. (2018) concluded that most approaches should be combined with others. Lin et al. (2018) further note that the selection should be the duration and resources that can be given to this activity. Stakeholder identification has been advocated for by several studies as the initial factor to consider (Karlsen, 2002; Elias et al., 2002; Young, 2006; Bourne & Walker, 2006; Olander, 2006; Lock, 2019).

4.3.4 Stakeholder Classification Criteria

The fourth section of Section B requested data on how stakeholder classification criteria. Table 4.6 following provides an illustration of the findings.

Table 4. 6: Stakeholder Classification Criteria

	Formal contract	Positive contribution to the project	Negative project influence	Positive project influence	Affected by project outcome
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	1.2%	0.0%	0.0%
disagree	0.0%	0.0%	44.2%	0.0%	0.0%
neutral	1.2%	1.2%	19.8%	1.2%	0.0%
agree	3.5%	37.2%	22.1%	34.9%	39.5%
strongly agree	95.3%	61.6%	12.8%	64.0%	60.5%

Source: SPSS Output (2022)

The merged results from table 4.6 above show that no respondent disagreed on any stakeholder classification criteria except for negative project influence where 34.9% agreed, 19.8% were not sure and 45.4% disagreed. As for those variables were the respondents mostly agreed those who are agreed were 98.8%, 98.8%, 98.9% and 100% for formal contract, positive contribution to the project, positive project influence and affected by project outcome respectively. However, some respondents were unsure and their proportions were 1.2%, 1.2%, 19.8% and 1.2% for formal contract, positive contribution to the project, negative project influence and positive project influence respectively.

4.3.5 Stakeholder Classification Composition

The fifth section of Section B requested data on the importance of the mix of stakeholder classification incidence for the effectiveness of stakeholder management. The outcomes are shown in table 4.7 below.

Table 4. 7: Stakeholder classification composition

	High internal/low external relationships	Low internal/high external relationships	Similar internal/external relationships	More proponent/ low opponent
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	1.2%	0.0%	0.0%	0.0%
Disagree	51.2%	0.0%	0.0%	7.0%
Neutral	20.9%	1.1%	0.0%	7.0%
Agree	25.6%	44.2%	37.2%	43.0%
strongly agree	1.1%	54.7%	62.8%	43.0%

Source: SPSS Output (2022)

The findings of the research in table 4.7 above show that for high internal/low external relationships the merged results showed that 26.7% agree whereas 52.4% disagreed and 20.9% were unsure. As for low internal/high external relationships, similar internal/external relationships and more proponent/ low opponent variables the respondents mainly agreed with there being no respondent who disagreed for the first two and only 7% disagreeing on more proponent/ low opponent.

The results of the research suggest that stakeholders in a project fall into various classes. Newcombe (2003: 841–848) explains that "stakeholder classification is an important part of the stakeholder management process because it aids in determining how each stakeholder group is likely to enforce its expectations on the project, whether these groups have the power to do so, and the likely impact of stakeholder expectations on project strategy." The findings validate the assertion that stakeholder classification is a significant aspect since it aims to categorize stakeholders for successful participation (Aapaoja and Haapasalo, 2014). The findings are evidence that many stakeholders have varied interests and expectations for the project. According to Chinyio and Olomolaiye (2010), some stakeholders are more important to the project's success than others, though this could alter as it advances and additional parties get engaged, reinforcing their base of support.

4.3.6 Stakeholders in construction projects

The last section of Section B requested data on how important the chosen project definition-related characteristics are to the effectiveness of stakeholder management. Table 4.8 below displays the findings.

Table 4. 8: Stakeholders in construction projects

	client	Suppliers / Sub contractors	Beneficiary / end user	Regulatory authority	Community	Project team	Project Managers
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%
disagree	0.0%	0.0%	0.0%	51.2%	0.0%	0.0%	0.0%
neutral	0.0%	0.0%	0.0%	20.9%	1.2%	0.0%	0.0%

Agree	9.3%	32.6%	53.5%	25.6%	44.2%	37.2%	45.3%
Strongly agree	90.7%	67.4%	46.5%	1.2%	54.7%	62.8%	54.7%

Source: SPSS Output (2022)

Table 4.8 above shows that for the questions on the first, second and third, fourth, fifth and sixth questions all the respondents agreed on who were the stakeholders in the construction projects with merged proposition results with 100% representing client, 100% representing suppliers/sub-contractors, 100% representing the end user, 26.8% representing regulatory, 98.9 representing community, 100% for project team and 100% for project managers. However, on the regulatory authority as being a stakeholder in construction projects 52.4% disagreed while 26.8% agreed collectively.

These findings suggest that in construction projects there are several key stakeholders. This is evidence that the construction company unquestionably has a lot of stakeholders. Stakeholders are identified as owners, sponsors, clients, local communities, subcontractors, project managers, superintendents, project team members, and end-users (Al-Khafaji, et al, 2009:59). Another study by El-Sawalhi and Hammad (2015: 157-169) advocate for the inclusion of architects, consultants, product and material suppliers, government regulators, public bodies in charge of granting permits, insurance and bonding firms, and the media as stakeholders in the construction sector. According to Enshassi, Abdul-Aziz and Abushaban (2012) numerous research mention, project owners, facility users, project managers, facility managers, designers, shareholders, legal authorities, employees, contractors, subcontractors, suppliers, process providers, and service providers all among the stakeholders in construction projects.

4.4 Section C: Who are the most important stakeholders based on their impact on the project.

The results of the descriptive analysis using the research tool are presented in this section.

4.4.1 Typical key stakeholders in a construction project

The first section of Section C requested data to discuss how important it is to identify typical key stakeholders in a construction project. The outcomes are displayed in Table 4.9 below.

Table 4. 9: Typical key stakeholders in a construction project

	Clients	Community	Contractors	Sponsor	Legislation	Project team
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	0.0%	0.0%	1.3%	0.0%
Disagree	0.0%	0.0%	0.0%	0.0%	52.2%	0.0%
Neutral	0.0 %	8.9%	0.0%	0.0%	21.5%	0.0%
Agree	7.3%	33.7%	30%	16.3%	19.2%	33.2
Strongly agree	92.1%	57.4%	70.%	83.7%	5.8%	66.8

Source: SPSS Output (2022)

The merged results from Table 4.9 show that respondents disagreed on legislation to be a key stakeholder in a construction project with 53.5%, agreed with 25%, and were not sure with the other 21.5%. As for those variables, the respondents mostly agreed; those who agreed were 100% on clients, 91.1% on community, 100% on contractors, 100% for sponsors, and 100% on the project team. However, some respondents were unsure, and their proportions were 8.9% for community.

4.4.2 Project Involvement Impact

The second section of Section C requested data to discuss how important is each of the following classification of stakeholders based on their project Involvement for ensuring stakeholder management is a success.

Table 4. 10: Project Involvement Impact

	Role in the project	Responsibilities in the project	Level of participation	Level of commitment	Level of contribution
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	0.0%	0.0%	0.0%	0.0%	12.3%
Disagree	0.0%	0.0%	0.0%	0.0%	15.3%

Neutral	0.0 %	0.0%	6.0%	13.3%	12.0%
Agree	38.0%	31.0%	44.0%	53.7%	41.2%
Strongly agree	62.0%	69.0%	50.0%	33.0%	19.2 %

Source: SPSS Output (2022)

In reference to table 4.10, the research`s findings show that the merged proportions for those who agreed on classification of stakeholders based on their project Involvement for ensuring stakeholder management is a success were 100% based on role in the project, 100% in responsibilities in the project, 94% on level of participation, 86.7 on level of commitment and 60.4% for the level of contribution. The proportions for those that were rather neutral on the issues were 6% on the level of participation, 13.3% on level of commitment and 12% on level of contribution. The merged findings for those who disagreed were 27.7% only on level of contribution. These findings suggest that involving stakeholders in a project improves stakeholder management success.

4.4.3 Stakeholders power attributes

The third section of Section C requested a data on how important it is to prioritising stakeholders based on power attributes for making stakeholder management process successful. Table 4.11 below present the outcomes.

Table 4. 11: stakeholder power attributes

	Power to influence decisions	Urgency of need	Legitimacy to demand need	Delegated power to influence	Power, legitimacy, and urgency
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	17.5%	6.8%	8.1%	17.4%	7.4%
Disagree	6.3%	7.3%	11.5%	4.8%	9.5%
Neutral	5.4%	9.5%	4.9%	10.7%	10.6%
Agree	53.1%	64.2%	66.2%	61.42%	62.0%
strongly agree	17.7%	12.2%	9.3%	5.7%	10.5%

Source: SPSS Output (2022)

The merged results from table 4.11 above indicate that study participants value stakeholder power attributes. Regarding having the ability to influence decisions, 70.8% agreed and 23.8% disagreed. On the value of urgency of need 76.4% agreed, while only 14.1% disagreed. On legitimacy to demand, 75.6% agreed, and 4.9% were

not sure, and only 19.6% disagreed. The fourth question asked whether delegation of power to influence is important to construction firms 22.2 % disagreed and 67.1% agreed. Lastly, respondents were asked whether they value power, legitimacy, and urgency and 72.5% agreed, while 16.9% disagreed and 10.6% were unsure.

4.4.4 Stakeholder Non-Power Attributes

The fourth section of Section C requested data on the level of importance they will accord to the chosen non-power traits of the stakeholder as having an impact on the effectiveness of stakeholder management. Table 4.12 below, shows the results.

Table 4. 12: Stakeholder Non-Power Attributes

	Interest in the project	View of project's importance	Impact on the project	Influence on the project	Needs and expectations	Dynamism and salience to project	Has shares in the project
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	6.8%	12.0%	14.4%	13.3%	5.0%	2.3%	10.5%
disagree	12.4%	15.5%	9.0%	11.4%	11.5%	10.0%	13.6%
neutral	15.5%	8.0%	10.9%	6.4%	9.5%	4.7%	10.6%
Agree	50.6%	54.1%	52.1%	54.5%	66.5%	62.5%	58.7%
strongly agree	14.7%	10.4%	13.6%	14.4%	7.5%	20.5%	6.6%

Source: SPSS Output (2022)

The merged results from table 4.12 show that on the first question, many of the participants stated that they have a prioritised interest in the project (65.3%), while very few disagreed (19.2%). The findings, in view of the project's importance, showed that 64.5% agreed. On construction companies` prioritisation of the impact of the project, 69.7% agreed. On whether they prioritise needs and expectations, 7.5% strongly agreed, 66.5% agreed, and 9.5% were not sure, and the merged results on disagreement showed that 16.5% disagreed. The merged results when asked whether they prioritize project dynamism and salience showed that, 12.3% disagreed while 76% agreed. Lastly, asked whether they prioritise having shares in the project, 6.6% strongly agreed, while 69.3% agreed, and 24.1% disagreed.

4.4.5 Stakeholder Analysis Method

The firth section of Section C requested data on how important the selected method of analysis for making a successful stakeholder management is. The outcomes are illustrated in Table 4.13 below.

Table 4. 13: Stakeholder Analysis Method

		strongly disagree	disagree	neutral	Agree	strongly agree
Stakeholder map template	Layer Row N %	10.4%	8.5%	13.7%	60.5%	6.9%
Stakeholder position mapping	Layer Row N %	8.8%	5.9%	6.7%	66.2%	12.4%
Stakeholder network analysis	Layer Row N %	9.4%	10.0%	14.6%	50.1%	15.9%
Stakeholder circle method	Layer Row N %	10.2%	20.9%	13.3%	30.0%	25.6%
Power/ Interest matrix	Layer Row N %	10.3%	7.8%	6.9%	57.6%	17.4%
Power/ Influence matrix	Layer Row N %	9.4%	15%	4.6%	60.1%	10.9%
Influence/Impact matrix	Layer Row N %	25.2%	11.3%	9.9%	45.0%	8.6%
Importance/Influence- salience model	Layer Row N %	6.8%	7.7%	3.7%	66.4%	15.4%
Help/Harm-potential matrix	Layer Row N %	15.2%	20.7%	14.5%	25.4%	24.2%
Power/Proximity	Layer Row N %	13.3%	7.7%	3.9%	61.6%	13.5%
Power/ Importance matrix	Layer Row N %	12.8%	10.3%	11.5%	60.0%	5.4%

Source: SPSS Output (2022)

The merged results for table 4.13 above show that many of participants value the stakeholder map template (77.4%), while only 18.9% disagree. On the second question 12.4% of respondents strongly agreed, while 66.2% agreed, 5.9% disagreed,

nevertheless, and 8.8% strongly disagreed. The merged results outcomes displayed in table 4.12 above illustrate that 66.0% agreed to value stakeholder network analysis, while only 19.4% disagreed. More so, on the stakeholder circle method, the majority agreed (55.6%) while only 31.1% disagreed; while on the power/interest matrix, 75% agreed, and 18.1% disagreed.

The merged results of this research further show that respondents value power/influence matrix as the majority agreed (71.0%) while only 34.4% disagreed. More so, asked whether the influence/impact matrix is important, 53.6% agreed, and 36.5% disagreed. More so, the merged results on the importance/influence-salience model, 81.8% agreed, and 14.5 disagreed.

Respondents were also asked the priority value of the Help/Harm-potential matrix and the merged results showed that 49.6% agreed, and 35.9% disagreed. As for power proximity and power/ importance matrix 75.1% and 65.4% agreed respectively whereas 21% and 23.1% disagreed respectively.

4.4.6 Stakeholder contributions

The sixth section of Section C requested data on how stakeholders contribute to the project's success. Table 4.14 below displays the results.

Table 4. 14: Stakeholder contributions

	Providing Expertise	Reducing and Uncovering Risk	Increasing Project Success	Granting Project Acceptance
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	15.2%	7.3%	9.4%	10.2%
disagree	9.8%	14.7%	12.0%	18.9%
neutral	7.8%	6%	7.6%	20.3%
agree	54.6%	61.2%	57.1%	35%
strongly disagree	12.6%	10.8%	13.9%	15.6%

Source: SPSS Output (2022)

The merged findings above illustrate that the majority of participants agree that stakeholders provide expertise 67.2%, while only 25% disagree. Among respondents, 10.8% strongly agreed that identifying and reducing risk should be done, while 61.2% agreed. However, 7.3% strongly disagreed, and 14.7% disagreed. The merged conclusions shown in table 4.13 above illustrate that 71.0% agreed with the fact that it increase project success while 7.6% were not sure and the merged disagreement

findings showed that 19.4 disagreed. Lastly, on granting project acceptance whether respondents use high internal or low external relationships, 15.6% strongly agreed, 35.0% agreed, and 20.3% were not sure, and the merged disagreement findings showed that 29.1% disagreed.

4.5 Section D: Most important factors that affect stakeholder management in the construction projects.

4.5.1 External environment-related factors

The first section of Section D requested data for establishing effective stakeholder management, and to consider elements relating to the external environment factors. Table 4.15 below displays the results.

Table 4. 15: External environment-related factors

			strongly disagree	disagree	neutral	agree	strongly agree
Economic issues	Layer	Column N %	10.20%	18.60%	6.30%	52.30%	12.60%
Cultural practices/influences	Layer Column N %		10.30%	5.60%	2.20%	68.60%	13.30%
Legal policies/legislation	Layer Column N %		15.00%	6.40%	4.60%	50.0%	24.0%
Ethics of firms/stakeholders	Layer Column N %		11.70%	6.80%	13.40%	57.70%	10.40%
Social behaviour/practices	Layer Column N %		16.00%	13.30%	1.20%	54.20%	15.30%
Political influences/policies	Layer Column N %		4.10%	3.20%	20.00%	18.20%	54.50%
Construction industry practices	Layer Column N %		18.00%	10.0%	17.0%	24.00%	31.00%
Labour agitations	Layer Column N %		5.00%	15.00%	20.00%	25.00%	35.00%
Absence of industry regulatory body	Layer Column N %		10.00%	5.00%	5.00%	22.00%	58.00%

Source: SPSS Output (2022)

The first question sought views on whether economic issues are important in ensuring stakeholder management and 12.6% strongly agreed while 52.3% agreed with 6.3% being uncertain. However, 18.6% disagreed, with 10.2% strongly disagreed. Findings indicated in Table 4.15 illustrate that construction companies value cultural practices/influences. 68.6% agreed, while only 5.6% disagreed with 2.2% being not so sure. Only 10.3% strongly disagreed, whereas 13.3% strongly agreed. For the third

question 50% agreed, 4.6% were unsure, and 24% strongly agreed that legal laws and legislation are vital in ensuring stakeholder management is successful. Whether construction companies value their stakeholders' or clients' ethics was the topic of the fourth question. Merged result indicated 13.4% were unclear, 18.5% disagreed, and 68.1% agreed.

Where participants were questioned about their value of social activities or behaviour. 54.2% of respondents agreed, 1.2% were unsure, and 15.3% strongly agreed. However, 13.3% disagreed while 16% disagreed strongly. Based on merged results, the participates provided the following in responses to the question whether the political influence is a factor, where 72.7% agreed, and 7.3 totally disagreeing and 20% indicated to be unsure. On the third last question, the merge results indicated that 54% were confident that construction industry practice is a factor, where 28% had a different view by disagreeing with that and 17% decided not to take sides. The second last question which relates to labour agitations, the following merged results were received where 60% agreed that labour agitations is a strong factor that needs to be consider when one peruse a successful stakeholder management. On the other hand 20% disagreeing with all that followed by other 20% whom were not certain. Last question was based on the absence the industry regulatory body, where merged results show 80% view this body as important with 15 completely disagreeing, with 5% not being sure about where does this body stand. The overview of these findings suggest all these factors to be consider when pursuing a successful stakeholder management.

4.5.2 Implementation, monitoring and feedback actions

The second section of Section D requested data on implementation, monitoring and feedback actions for ensuring successful stakeholder management. Table 4.16 below presents the findings.

Table 4. 16: Implementation, monitoring and feedback actions

		strongly disagree	disagree	neutral	agree	strongly agree
Implementing fully, project feasibility brief	Layer Column N %	17.10%	16.10%	1.40%	55.20%	10.20%
Implementing fully, stakeholder needs plan	Layer Column N %	15.30%	6.90%	4.50%	13:30%	60.00%

Full implementation of stakeholder management objectives	Layer Column N %	13.00%	7.40%	6.60%	54.10%	18.90%
Implementation of stakeholder communication plan	Layer Column N %	11.70%	12.80%	7.40%	57.70%	10.40%
Monitoring project objectives achievement	Layer Column N %	13.30%	15.30%	8.20%	42.20%	21.00%
Monitoring stage activity and effectiveness	Layer Column N %	13.00%	14.00%	8.00%	10.00%	55.00%
Monitoring stakeholders need achievement	Layer Column N %	2.00%	10.00%	0.00%	22.00%	66.00%
Documenting the entire stakeholder process	Layer Column N %	0.00%	0.00%	0.00%	12.00%	88.00%
Implementing decisions on feedback	Layer Column N %	0.00%	0.00%	0.00%	24.00%	76.00%

Source: SPSS Output (2022)

The first research question gathered respondents' opinions on whether fully implementing the project feasibility brief was important in ensuring project success. 55.2% agreed, and 10.2% strongly agreed. However, 17.1% strongly disagreed, and 16.1% disagreed where 1.4% was not sure. The outcomes in table 4.16 demonstrate that Construction Company's value fully implementing stakeholder needs plans; 13.3% strongly agreed, 60% agreed, and the merged disagreement results showed that only 22.2% disagreed. On whether the stakeholder management objectives should be fully implemented, 18.9% strongly agreed, 54.1% agreeing, 6.6% unsure, and the merged disagreement results showed that 20.4% disagreed.

The merged findings on the fourth question that centred on the significance of a stakeholder communication plan where the results showed that 7.4% were unsure, 24.5 % disagreed, and 68.1% agreed. The importance of tracking the accomplishment of project objectives was posed to respondents. 42.2% agreed, followed by 8.2% who were unsure, and 21% who strongly agreed. However, 15.3% disagreed, and 13.3% strongly disagreed. The merged findings on whether monitoring each stage in the project lifecycle and effectiveness does add value to successful stakeholder management, 65% believed it does and 27% were disagreeing and 8% were not certain. The question around the importance of monitoring stakeholders need achievement was posed and the merged feedback results indicated that 88% view this as important while 12% disagreeing. The importance of documenting the entire

stakeholder process was viewed to be fundamental with agreed merged result of 100% alongside with implementing decisions on feedback with 100%.

4.5.3 Engagement-related methods

The third section of **Section D** requested data on the methods of stakeholder engagement that influence effective communication. The outcomes are presented in Table 4.17 below.

Table 4. 17: Engagement-related methods

		strongly disagree	disagree	neutral	agree	strongly agree
Adopting proactive communication	Layer Column N %	12.90%	7.50%	7.50%	55.50%	16.60%
Using open communication	Layer Column N %	11.20%	15.60%	8.7	56.00%	8.50%
Using emails for correspondence	Layer Column N %	12.40%	14.00%	5.90%	57.10%	10.60%
Communicating using telephone	Layer Column N %	20.30%	13.30%	6.40%	52.60%	7.40%
Organizing stakeholder conference	Layer Column N %	10.30%	10.70%	5.80%	65.70%	7.50%
Organizing stakeholder workshops	Layer Column N %	4.60%	5.00%	6.40%	54.00%	30.00%
Using social platforms	Layer Column N %	0.00%	3.00%	0.00%	20.00%	77.00%
Using planned communication	Layer Column N %	11.00%	2.00%	0.00%	57.00%	30.00%

Source: SPSS Output (2022)

The merged results on the first question showed that many (72.1%) of the participants indicated that use proactive communication was important while very few disagreed (20.4%). Findings on using open communication showed that 8.5% strongly agreed while 56.0% agreed. Results shown in Table 4.17 illustrate that construction companies also use emails for correspondence, as 10.6% strongly agreed while 57.1% agreed, leaving merged disagreeing result at 26.4. On whether they used communication by telephone, 7.4% strongly agreed, 52.6% agreed, and 6.4% were not sure, and 20.3% disagreed.

Third last question asked whether they organize stakeholder conferences, 7.5% strongly agreed, while 65.5% agreed, 10.7% agreed, and 10.3% strongly disagreed.

The views and results were merged that illustrate whether stakeholder workshops should be held or not, 84% confirmed it is a good practice while 9.6 completely disagreeing, leaving 6.4% undecided. In using social platforms to engage with stakeholders was viewed as one of the important method with merged results agreed 97%, with 3% disagreeing. With the final question using a planned communication, 57% view this a an important aspect when dealing with stakeholder management, and 30% strongly believe using planned communication does deliver stakeholder satisfactions, while merged 13% disagreeing.

According to the study's findings, effective stakeholder management is positively impacted by the ways of stakeholder engagement that could influence effective communication. Osei-Kyei and Chan (2015) support the concept that effective stakeholder communication and engagement are essential elements of the project stakeholder management process. In another study, Al-Khafaji et al. (2009) found that any organization's ability to build and retain a vibrant and ongoing link is critical to its existence. Chinyio and Olomolaiye (2010) state that the project manager can choose either telephones, emails, instant messages, or social media platforms. Martinez and Olander (2015) say project managers can organize stakeholder conferences to help engage with their stakeholders.

4.5.4 Factors relates to conflict resolution and lead on successful stakeholder management.

The fourth section of **Section D** requested data on factors relates to conflict resolution and lead to successful stakeholder management. The outcomes are presented in Table 4.18 below.

Table 4. 18 Factors relates to conflict resolution and lead on successful stakeholder management.

		strongly disagree	disagree	neutral	agree	strongly agree
Having the ability to predetermine possible conflicts	Layer Column N %	17.10%	16.10%	1.40%	55.20%	10.20%
Having the ability to resolve conflicts	Layer Column N %	15.30%	6.90%	4.50%	60%	13.30%
Having capacity to determine conflict type	Layer Column N %	13.00%	7.40%	6.60%	54.10%	18.90%
Stakeholders being willing to resolve conflict	Layer Column N %	11.70%	12.80%	7.40%	57.70%	10.40%

Embarking on early conflict resolution	Layer Column N %	13.30%	15.30%	8.20%	42.20%	21.00%
Ensuring fair play during resolution	Layer Column N %	0.00	0.00	0.00	87.00%	23.00%
Ensuring transparency between stakeholders	Layer Column N %	5.00%	2.00%	0.00%	72.00%	21.00%
Ensuring that conflict resolution process is transparent	Layer Column N %	0.00%	0.00%	6.00%	12.00%	82.00%

Source: SPSS Output (2022)

In reference to table 4.18, the research`s findings show that the merged proportions for those who agreed on having ability to predetermine possible conflicts were 60.4%, followed by 33.2% disagreement and with 1.4% not being certain. Having ability to solve conflict received 73.3% from those who believed this lead to successful stakeholder management with 22.2% disagreeing, leaving 4.5% reaming uncertain.

The merge merged proportions for those who argue and agreed that one need to have the capacity to determine conflict type reflect 73% with 20.7 disagreeing and 6.6% decided to be neutral with the issue. Others were determine to indicate that stakeholders should be willing to resolve conflict with 68.1% agreeing with merged result and 24.5% opposing that view and leading to 7.4% being unable to take sides. Others suggested with merged results that embarking on early conflict resolution should be considered with agreed 63.2% and 28.6% disagreeing, leaving 8.2% unsure. The question cantered around ensuring fair play during resolution received merged proportion of 100% agreed. Followed by a need to ensure transparency between stakeholders with 93% agreed and with 7% disagreeing. This session was closed by a question that require to a conflict resolution process to be transparent, 82% strongly agreed with 12% agreeing and 6% not sure.

4.5.4 Possible indicator outputs of successful stakeholder management process

The firth section of Section D requested data on possible indicator outputs of successful stakeholder management process. The outcomes are specified in table 4.19.

Table 4. 19: Possible outputs

		strongly disagree	disagree	neutral	agree	strongly agree
Reduced project time	Layer Column N %	7.00%	20.50%	2.30%	56.50%	13.70%
Improved project quality	Layer Column N %	16.60%	14.10%	3.70%	50.40%	15.20%
Achievement of stakeholder satisfaction and needs	Layer Column N %	10.90%	12.00%	7.50%	64.10%	5.50%
Improved project delivery	Layer Column N %	1.20%	9.90%	6.80%	71.40%	10.70%
Early stakeholder identification	Layer Column N %	11.30%	25.70%	9.70%	42.10%	11.20%
Improved stakeholder collaboration	Layer Column N %	8.00%	13.00%	12.00%	48.00%	19.00%
Excellent communication	Layer Column N %	0.00	0.00%	4.00%	68.00%	28.00%
Reduced conflicts	Layer Column N %	12.00%	20.00%	28.00%	32.00%	8.00%
Continuous key stakeholders support	Layer Column N %	4.00%	16.00%	3.00%	54.00%	23.00%
Good relationship and trust	Layer Column N %	0.00%	0.00%	0.00%	22.00%	78.00%
Well considered external environment factors	Layer Column N %	3.00%	5.00%	12.00%	36.00%	44.00%
Increase profit for stakeholders	Layer Column N %	16.00%	20.00%	14.00%	32.00%	18.00%
Increased project socio-economic benefit/value	Layer Column N %	15.00%	20.00	9.00%	38.00%	18.00%

Source: SPSS Output (2022)

The first question solicited data on the views of respondents on whether they used reduced project time to ensure project success. In response to this question, 13.7% strongly agreed and 56.2% agreed to this statement. 15.3% of people disagreed, however 21.0% strongly disagreed. Outcomes presented in table 4.17 illustrate that the construction companies value improved project quality; 65.6% agreed while only 30.7% disagreed. On whether achievement of stakeholder satisfaction and needs is important, 5.5% strongly agreed, 64.1% agreed, 7.5% were not sure, and only 22.9%

disagreed. The fourth question asked whether improved project delivery is important to construction firms. 21.8% disagreed, 6.8% were unsure and 71.4% agreed. The fifth question respondents were asked whether they value early stakeholder identification. 11.2% strongly agreed, while 42.1% agreed, and 9.7% were not sure. However, 11.3% strongly disagreed while 25.7% disagreed.

Respondent were further asked if improved stakeholder collaboration stand to be an indicator output for a successful stakeholder management process, with merge proportion agreed represented 67% , with 13% disagreeing and 12% were those who were uncertain. Excellent communication views an indicator that should be considered with merged result of 96% agreeing and 4% not being sure. On the reducing conflict subject with merged results, 40% agreeing this to be a good thing, while 32% were not convinced that reducing conflict should be an indicator and 28% were not sure. The question cantered around continuous key stakeholders support was supported with merged results where 77% agreed, while 20% were opposing with 3% being uncertain. Good relationship and trust viewed as the most important indicator that lead to a successful stakeholder management process with merged result of 100% agreeing. The question a round to consider external factors received 44% people strongly agreeing, 36% agreeing, 12% decided to be neutral with merged disagreed of 8%.

The merge merged proportions results for those who argue and agreed that increase profit for stakeholders is an indicator are 50% agreed, with 36% disagreed and 14% were not sure. The last question was whether the increased project socio-economic benefit/value as an indicator can lead to effective stakeholder management. Out of 100% of the 86 respondents, 38% strongly agreed, followed by 18% agreeing with 9% being unsure and leaving the merged result of 35% disagreed

4.5.5 Strategy Types

The sixth section of Section D requested data on the extent to which each of the selected strategies can be sustainable stakeholder management. Table 4.18 below shows the outcomes.

Table 4. 20: Strategy Types

	Adaptation strategy	Avoidance strategy	Compromising strategy	Dismissal strategy	Influence strategy
	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %	Layer Column N %
strongly disagree	8.0%	12.5%	4.7%	3.4%	25.7%
disagree	13.3%	8.8%	14.0%	18.4%	16.3%
neutral	15.2%	3.3%	7.3%	3.8%	6.7%
agree	54.2%	70.2%	64.5%	63.7	41.1%
strongly agree	9.3%	5.5%	9.5%	10.7%	10.2%

Source: SPSS Output (2022)

In the first question, it was asked if they adhered to stakeholder requests and rules, or if they used an adaptability strategy. 54.2% agreed, while 9.3% strongly agreed. 13.3% of people disagreed, albeit 8% strongly disagreed. Results from table 4.18 above reveal that construction companies utilize an avoidance approach by letting go of stakeholder claims and attachments in order to defend and insulate themselves from them, with the merged data showing that 75.7% agreed with only 21.3% disagreeing. On the question of whether they employ a compromising tactic when negotiating with the stakeholders, hearing their concerns about the project and providing opportunities and forums for discussion, the results show that 9.5% strongly agreed, 64.5% agreed, 7.3% were unsure, and the merged results for disagreement showed that 18.7% disagreed. The fourth question centred on whether they employ a dismissing tactic by putting off stakeholder demands that have been put out. 63.7% agreed, 10.7% strongly agreed, and 3.8% were undecided. 18.4%, including 3.4%, strongly disagreed, nonetheless. Finally, respondents were asked if they actively shape the values and desires of stakeholders as part of their influence strategy. The findings showed that 41.1% agreed, 10.2% strongly agreed, 6.7% were unsure. However, 25.7% strongly disagreed, and 16.3% disagreed.

These findings reveal that respondents had an ‘agree’ attitude towards the adoption of all the strategies in ensuring that the projects are successful. This is consistent with literature that suggests stakeholder demands and claims may cause construction projects to respond in a variety of ways to cope with the challenges that have arisen. For instance, Aaltonen and Sivonen (2009) are of the view that corporations working

on international projects may adopt a range of strategic actions in response to stakeholder pressures and these responses can be passive or active.

4.6 Qualitative data analysis

In-depth interviews with carefully chosen candidates were conducted to acquire the qualitative data used in this section. Interview questions were used as sub-themes in the data analysis. All interviews were face to face with Covid 19 protocols observed and recorded with transcribed and then analysed through the use of thematic analysis. All the people interviewed participated voluntarily and the interviews lasted between 20 and 35 minutes.

4.6.1 Demographic data

The interview's opening section concentrated on the interviewees' and their companies' demographic information. The results are summarized in Table 4.21 below.

Table 4. 21: Demographic data of the interview participants

	Participant's demographic			
Code	**Age**	**Position**	**Education**	**Work duration as a PM in construction industry**
1	47	Programme Director	Bachelor's degree	18
2	40	Senior Project Manager	Bachelor's degree	13
3	39	Senior Project Manager	Diploma	9

The research respondents' ages ranged from 39 to 47 years old, as shown in Table 4.21. One respondent had a diploma, while two others had a bachelor degree. The respondents were split based on their level of education. Two project managers and one programme director were among the three participants.

4.6.2 Description of findings

4.6.2.1 Who are the stakeholders in construction projects?

The initial section of the second part gathered information on the stakeholders in the construction projects. During the data gathering process, some respondents provided the following responses.

P1:

"Key stakeholders in a construction project typically include the client, community, project team, financial entities and relevant government entities. The stakeholder group is best managed through an integrated approach, whereby a central steering committee is established with regular session to adequately track progress and deal with issues"

P2:

"The stakeholders vary from individuals to organizations – The project team, project sponsor, and client are some of the individuals that can be considered to be project stakeholders. Organisations that could be stakeholders are legislators such as local government, Department of Environmental affairs, the CIDB, etc – all of which depend on the nature, size and location of the project"

P3:

"Local Community, Main Contractor, Sub-Contractors (or emerging), Consultant (Construction Supervision), End User"

The participant's views illustrate that there are many stakeholders in the construction projects where client, community, project team, financial entities, sponsor sub-contractors and government entities. These findings are also in line with those of quantitative data in Table 4.8 that shows all the respondents agreed on who were the stakeholders in the construction projects with merged proposition results with 100% representing client, 100% representing suppliers/sub-contractors, 100% representing the end user, 26.8% representing regulatory, 98.9 representing community, 100% for project team and 100% for project managers. Qualitative data shows that stakeholders vary from individuals to organizations. The findings also illustrate that the stakeholders are best managed through an integrated approach, whereby a central steering committee is established with regular sessions to adequately track progress and deal

with issues. These findings were also analysed using the similarity and common approach from looking what seems to be similar and common across all response and spotting relationship in variances

4.6.2.2 Who are the most important stakeholders in construction projects and why?

The information on the most important stakeholders in construction projects and the reasons why was gathered in the second portion of the second section. Respondents had this to say:

P1:

> *"The most important stakeholders in a construction is the client and the project team."*

P2:

> *"The importance of stakeholders can vary throughout a project. The most important ones at any given time are the ones that may have the greatest impact or influence on your project."*

P3:

> *"Client, Local Community, Main Contractor, Consultant (Construction Supervision)"*

These statements shows that every stakeholder is important in construction. However, the value of a stakeholder depends on the circumstances in the construction project. One other participant indicated that the most important stakeholders at any given time are the ones that may have the greatest impact or influence on your project. Generally, participants agreed that the client, local community, main contractor, project team, and the consultant (construction supervision) are the most valued stakeholder.

4.6.2.3 How one should engage stakeholders effectively?

The participants were also asked on how to effectively engage stakeholders. Participants had this to say

P1:

"Effective stakeholder engagement is founded in a deep understanding of the relative power and interest held by a particular stakeholder. The more influence (or power) the stakeholder has, the more the project team should make an effort to align the project

work with the requirements of that stakeholder. Similarly, the more interest that a stakeholder has in the work of the project, the greater the amount of effort must be to keep the stakeholder informed on all aspects relating to the project"

P2:

"Stakeholders should be engaged based on their individual requirements, power and influence on the project. The most attention and level of effort needs to be given to the stakeholders that may have the greatest impact on the project outcome"

P3:

"Stakeholders should be identified, analysed and monitored through planned engagements based on their impact and influence on the project"

These statements show that every stakeholder is important in construction. However, the value of a stakeholder depends on the circumstances of the construction project. One other participant indicated that the most important stakeholders at any given time are the ones that may have the greatest impact or influence on your project. Generally, participants agreed that the client, local community, main contractor, project team, and the consultant (construction supervision) are the most valued stakeholders.

4.6.2.4 What tools should be used to manage and engage stakeholders?

The fourth section of the interview guide was meant to establish the tools that can be utilised to deal with and engage stakeholders in construction projects. Participants had this to say.

P1:

> *"Stakeholders are managed through effective communication channels. Tools that may be used for this purpose include project documentation, emails, meeting minutes and reports. Informal tools such as mobile phone applications are also gaining popularity to aid with stakeholder management"*

P2:

"Stakeholder Register, Stakeholder Matrix, Stakeholder Management Plan, and a Stakeholder Engagement Plan".

P3:

"Stakeholders should be analysed and mapped via a stakeholder classification model to plan future engagements."

The study findings illustrate that there are several tools that construction projects can use to manage and engage stakeholders. Apart from being identified, analysed and monitored, the findings indicate that stakeholder relationships are strengthened through effective communication through ICT tools. Tools such as stakeholder registers, stakeholder matrix stakeholder management plans, and stakeholder engagement plans need to be used to effectively manage stakeholders.

4.6.2.5 Identify key factors that affect stakeholder management?

This section was meant to ascertain the major factors that affect stakeholder management. The findings from the survey are shown below.

P1:

"Stakeholder management could be impacted by a number of factors. These comprise of but are not limited to the priority of the project, the competency of the project management team, the company culture, the formal requirements in the project governance process, and access to effective communication channels.

P2:

"Key factors could be organizational culture, operational environment, legislation, policies etc"

P3:

"Having a formal approach to stakeholder management; Understanding that this process is about building and establishing healthy relationships; The project team should strive to create an environment where stakeholders are encouraged to provide their inputs and concerns."

The results show that there are a number of factors that may have an impact on stakeholder management. The importance of the project, the skill level of the project

management team, the operational setting, corporate culture, the law, the rules, the formal requirements in the project governance practice, and access to efficient communication channels are among the key issues. However, participants indicated that having a formal approach to stakeholder management, aiming to establish healthy relationships, creates an environment that fosters stakeholder engagement and communication.

4.6.2.6 Identify key factors that contribute to the success of stakeholder management?

The primary factors affecting the success of stakeholder management were the focus of this segment of the interview programme. The results from the survey are outlined below.

P1:

"Two key factors for ensuring good stakeholder management for a project is (1) ensuring that all stakeholders are identified at the start of the project, and (2) having a good communication strategy in place to ensure and maintain alignment throughout the stakeholder group at all times"

P2:

"Project management competence, resource availability, organisational processes, availability of communication platforms"

P3:

"Identify all stakeholders and focus on key stakeholders up front; Ensure adequate levels of communication with stakeholders; The project team should strive to create an environment where stakeholders are encouraged to provide their inputs and concerns"

From aforementioned statements, respondents believed that there is no single style recommended to be utilized by construction project teams ensuring that stakeholder management is a success. However, the majority agree that factors such as project management competence, resource availability, organizational processes, and availability of communication platforms are important in ensuring success in stakeholder management. Generally, it can be seen that the identification and focus

on key stakeholders is paramount in ensuring the success of stakeholder management.

4.6.2.7 What opportunities and challenges do stakeholders present to a firm?

The last section aimed at ascertaining opportunities and challenges stakeholders present to a firm. The findings from the survey are as follows.

P1:

"Stakeholders present both opportunity and challenges to firms, and the way that the project team views and understands that is a crucial component of how they respond to stakeholders. For instance, in a construction-type project, stakeholders that link the project work back to regulatory requirements could pose the biggest threat to the project if their involvement is not adequate, and as such, these stakeholders must be classified as a high-power, high-interest stakeholder. By focusing on the extensive involvement of all stakeholders, especially during the front-end loading phases of the project, presents the greatest opportunity for the project to progress through execution without being delayed"

P2:

"Opportunities: the ability to influence project outcomes in a positive light, key decisions being taken timeously, requests being sign-off etc. Challenges: Resistance can be faced from certain stakeholders that can negatively impact a project. Negative stakeholders can delay project completion and their actions can lead to project failure"

P3:

"Opportunities: Establishing good relationships with local communities; Identifying risks for future projects of a similar nature, lessons learned and creating a platform for improvement; Understanding stakeholders needs and expectations that can be taken into account in planning processes…….Challenges: Stakeholders not willing to engage with project teams; Poor stakeholder management can lead to bad publicity for firms. Risk of exposing stakeholders to inadequacies in a firms management and execution of a project; Stakeholders may take advantage and exploit the stakeholder management process for self-gain. This can create community unrest. EG "Business Forums" and the "Construction Mafia"".

It was established that respondents agreed that there are both opportunities and challenges that stakeholders do present to a construction firm. The findings indicate that challenges include resistance from certain stakeholders that can negatively impact a project. This will delay project completion and, at times, project failure. Stakeholders may occasionally be reluctant to contact with project teams due to poor stakeholder management and the potential danger of exposing stakeholders to flaws in a company's management and project execution.

However, there are also opportunities that can come with stakeholders. These include the establishment of good relationships with local communities; identifying risks for future projects of a similar nature; lessons learned and creating a platform for improvement; and the ability to understand stakeholders' needs and expectations that can be taken into account in planning processes. Given that stakeholders present both opportunities and challenges to firms, project supervisors should have a deeper comprehension of stakeholder supervision.

4.7 Chapter summary

Both quantitative and qualitative results were presented in chapter four. Analysis of quantitative data was done in form of descriptive statistics. Content analysis was used with regards to qualitative data. The data analysis was guided by the research tools. The chapter that follows presents the study's conclusion that includes the research recommendations and topics that need more investigation.

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The preceding chapter's main subjects were the presentation and analysis of the data that was acquired from participants through questionnaires and interviews. This implies that the preceding chapter looked at both quantitative and qualitative data. The data was used in this chapter to develop conclusions about the research questions and study objectives. In light of the results of the entire investigation, recommendations were made.

5.2 Conclusions

The conclusion, according to McCombes (2021), is the last part of a dissertation, and its main aims are to clearly state the response to the study questions and affirm the fulfilment of the research objectives, and to summarize and reflect on the entire study. The initial objective of this research was to identify the typical stakeholders who should be involved in any construction project. The research findings are in line with the more comprehensive presentation of stakeholders shown by Winch (2010), who categorises construction stakeholders into two main categories that include internal and external stakeholders. The category of internal stakeholders is also divided into two divisions, and these are demand-side and supply-side. The stakeholders involved in the supply side are the architects, engineers, principal contractors, trade contractors, and material suppliers, while the stakeholders involved in the demand side are the client financiers, employees, customers, tenants, and suppliers.

These stakeholders have been acknowledged throughout the entire dissertation. In the same review of the relevant and related literature, stakeholders are not only categorized but explicitly and technically listed. According to Enshassi, Abdul-Aziz and Abushaban (2012), project’s owners, facility users, project managers, facility managers, designers, shareholders, governing bodies, employees, contractors, subcontractors, suppliers, and process and service providers are among them. As such, the literature did not only respond to the first research question but also fulfilled the first objective, which is also concerned with identifying the diverse stakeholders and their interests in construction projects.

It is important to take into cognisance that drawing a conclusion based on a literature review alone is limited. As such, there is a need to extend even to the information that was collected from the study participants. This section concludes that the data collection tools employed in this research were suitable and relevant to the study situation. In a bid to respond to the first research question, whose demand was to identify the typical stakeholders who are included in a construction project. The questionnaire was used to ascertain the identification of stakeholders in the stages of a project. It has been shown quantitatively that the larger number of respondents prefers all interested parties to be identified before the construction signs off. This implies that the stakeholders should be identified before any work is started so as to administer all activities in order. What is interesting at this stage is that the analysis of data does not merely identify the stakeholders but goes further to choose the stakeholders as per phase of the project.

The findings of this research shows the imperatives of knowing who is doing what prior to the project itself. Olander (2007) supports this by alluding that, before a major decision is made in the construction project, a stakeholder must be recognized according to his/her ability. This above-mentioned scholar's views are similar to what this research is concerned about because it focuses mainly on the recognition of the stakeholders, like many others, while this research has identified stakeholders and even shown the most proper identification stages. In terms of the first research question, it can be concluded that no construction project can be executed smoothly without identifying the responsible stakeholders, let alone at specific stages.

In the same vein, qualitative conclusions need to be shown as well. The responses to the interviews are not in disparity as compared to those of the questionnaires, which shows the authenticity and consistency of this research. The main stakeholders in construction projects are recognized through qualitative data as clients, the community, financiers, and the project crew. In the identification of the construction projects, the participants showed that stakeholders can best be managed when they are identified and recognized before the contract starts. The identification of the stakeholders in construction projects is an undisputed activity, which should always be taken into consideration. Therefore, it follows that identifying and understanding the stakeholders will determine the success of a construction project.

In the process of drawing a more comprehensive conclusion, the second research question needs to be responded to as well. The second research sought to identify the most important stakeholders in the construction project and rank them according to the extent of the part they play. The researcher's focus during the literature review for this study was primarily on the writings of Mitchell (1997) and Olander (2007). Mitchell (1997) gives a definitive classification of stakeholders that has undoubtedly stood the test of time, which implies that many scholars refer to this classification by Mitchell. Mitchell (1997) first identifies these attributes as "power," which means the capability of a stakeholder to positively or negatively influence the actions of other partners or the project's decision-making process. This is something that can be acquired as well as lost. Legitimacy refers to the stakeholders' claims being judged on their perceived validity. It can also be described as stakeholders who face project-related risks that could benefit or harm the project. Proximity means the level of inclusion of the project's stakeholders. They can either be involved directly or indirectly by operating while away or remotely depending on their closeness. "Urgency" is the degree to which a partners claims calls for close attention. Olander (2007) categorizes stakeholders as either supporters or enemies of the project. A conclusion can therefore be drawn based on the literature review that , for a construction project to be successful, there are attributes that the stakeholders need to possess that will determine their agreeing or disagreeing with the work of the project.

Questions have been formulated again in the methodology stage of this study, particularly in addressing the second research question. The data that addresses this question is quite interesting and shows the in-depth approach of this study as far as the impact of stakeholders in construction projects is concerned. Quantitative data has shown that identifying stakeholders is crucial to the partner management process due to its aids in establishing the likelihood that each partner group will implement its vision for the project. This is regardless of whether these organizations have the authority to do so, and the likelihood that stakeholder expectations will have an impact on the project's strategy. The findings confirm the assertion that stakeholder classification is a significant aspect since it aims to categorize stakeholders for successful participation (Aapaoja & Haapasalo, 2014). The findings are evidence that many stakeholders have varied interests and expectations for the project. Chinyio and Olomolaiye (2010) suggest that some stakeholders are confirmed to be more crucial to the project's

success than others though this may change as the project moves forward and more interested parties broaden their base of support. Given such substantive empirical evidence, it is onerous to shun the classification of stakeholders as a way of defining the success of a construction project and evaluating the stakeholders' abilities. It can therefore be concluded based on the quantitative data that there is an undisputable correlation between the classification of stakeholders and the stakeholders' management, evaluation, and positive performance.

Interviews' responses are also in agreement with the quantitative data. Additionally, it has been identified by participants who were interviewed that there are stakeholders who may be referred to as important in construction projects. The most important stakeholders, according to the findings of this study, are clients and the project team. If one of these is absent, then it means that the project will be heading for failure. It can also be concluded that the value of the stakeholders varies depending on the role that they play, which implies that stakeholders can never be evaluated in general then pinned down using that criteria but rather there is need to classify them, as suggested by the findings of the quantitative analysis. The conclusion that can be drawn with regard to this question is that the stakeholders in construction projects need to be classified according to their roles. This will enable one to see who holds the most critical position. Hence, management becomes mundane.

The study's final goal was to address the issues that affect the stakeholder management process in construction projects in the Western Cape. This question has been attended to through the review of related literature, questionnaire, and interviews. The literature that has been reviewed in reaction to this question undoubtedly shows that there are factors affecting the stakeholder management process, but there are gaps that the researcher realised which the qualitative and quantitative information of this study has tried to close. Scholars prove that the track record of the management of stakeholders is still lagging behind. This is a sign that the methods, strategies, and approaches used in the management process are still poor. That is why Lock (2007) purports that the construction industry, on the other hand, continues to have a poor stakeholder management track record, owing to a failure to methodically identify, engage, analyze, and monitor project stakeholders. As a result of this situation, many scholars agree that the factors affecting stakeholder management should be identified. Stakeholder identification, development,

assessment, and prioritization are common factors that contribute to the effectiveness of the stakeholder management process. It is crucial to take into account these aspects in order to wrap up this story. As appealing as these factors are to any reader, it should be noted that there is still an ideal approach to deal with the management process in construction projects.

The data collected through questionnaires shows that among economic issues, cultural practices, ethics of firms and social behaviours, legal policies tower as the most important factor that determines the success of the stakeholder management process. This implies that as much as stakeholder assessment, prioritisation, and development are important in the management process of stakeholders, they are limited if the role played by external factors is disregarded, let alone the legal policies. A recent study that touched on the importance of legal policies in the construction industry was conducted by Dithebe, Aigbavboa, Thwala, Hayhow & Talebi in 2021. Dithebe, Aigbavboa, Thwala, Hayhow & Talebi (2021) put it clear that research from Loosemore, (2006), Bourne and Walker, (2006) and Rowlinson and Cheung, (2008) have established the problems that affect stakeholder management as the factors causing failure of construction projects. These challenges include ineffective engagement amongst stakeholders; lack of use of already available communication channels; and unclear and incoherent goals provisioned by stakeholders (Jayasuriya *et al.*, 2019). Mok *et al.* (2017) established that amongst factors regarding stakeholder consultation, issues linked to clients were more evident as compared to those from other stakeholders. However, their research focused on legal and regulatory factors resulting in disputes in PPP projects and how CSFs for stakeholder management can be utilised to solve the mentioned challenges. The limitation of this research is that it focused on the PPP projects. As a result, this research fulfils its purpose as far as construction projects are concerned. A conclusion can therefore be drawn that legal issues are the first and foremost external factors that ensure successful stakeholder management process in construction projects.

The interviewees expressed that the operational environment, company culture, and legal policies are of paramount importance in ensuring the success of the stakeholder management process. From the findings, it is clear that several issues could affect stakeholder management. The importance of the project, the project management team's competence, the operational environment, the corporate culture, laws and

rules, the formal requirements of the project governance process, and access to efficient communication channels are among the key concerns. However, the participants indicated that having a formal approach to stakeholder management, aiming to establish healthy relationships, creates an environment that fosters stakeholder engagement and communication. This research has shown that the management process cannot be done in an unstructured way, but there should exist a formal and ideal way of administering this, which includes allegiance to legal policies.

5.3 Recommendations

- The Western Cape's stakeholder management can be improved by making sure that project stakeholders are successfully managed first. The elements that affect prior-partner identification, partner identification, assessment, involvement, conflict management and utilisation, monitoring, and feedback will need to be carefully taken into consideration in order to do that.
- It is crucial that the indicator variables are thoroughly reviewed with regard to their impact on the construction project when taking into account these elements, which were recognized as very important success determinants for stakeholder management success. For example, having sufficient and excellent project feasibility research must be the most crucial component to take into account.
- It is advised that the project development and planning departments in charge of project implementation carefully weigh each of the important variables according to how they will affect the overall model. Therefore, the most important factor to take into account is the identification of pre-stakeholders, which is followed by dispute resolution, implementation, monitoring, and feedback, engagement, the identification process, and assessment. Due to its inefficiency, efforts should be made to improve the stakeholder identification process by educating stakeholders on its advantages. Project managers and development officers should also have access to an updated stakeholder registration. The same goes for stakeholder engagement, since effective communication is crucial to both project success and dispute resolution.
- It is advised that the contractors choose a capable project manager to successfully lead the stakeholder management while also giving the project management team an appropriate amount of responsibility and delegation.

- The significant barrier elements highlighted should also be taken into consideration by project managers. This is so that they can influence the success of stakeholder management. The impact of economic performance should be taken into account more so than anything else because it will decide whether project targets can be met in relation to the target cost. Additionally, for big projects including stakeholders from several nationalities, consideration must be given to the various cultural, moral, social, and legal challenges that may arise. For increased stakeholder management performance, stakeholder integration must be pursued in addition to cooperation.
- Based on agreed-upon shared goals, objectives, and project priorities, each project must establish a clear scope of work for the various stages of the project.
- The project managers should define the evaluation criteria openly for the analysis of alternative solutions at an early stage.
- Customers and sponsors are the most important stakeholders in building projects in the Western Cape, thus project managers should collaborate closely with them and pay greater attention to them.

5.4 Suggestions for future research

- It would be wise to conduct additional research on how stakeholders in construction projects are managed in terms of their knowledge areas.
- The use of stakeholder evaluation in construction project management at all phases and levels of project execution that involve both internal and external stakeholders requires more study. The analysis and the conclusions generated from it should also undergo a sensitivity analysis to determine how the weighted distribution of stakeholder attribute value might impact them.
- It is also important to conduct research in future that focuses on ways that can be adopted to enhance effective stakeholder management process.

REFERENCES

Aaltonen, K. and Sivonen, R., 2009. Response strategies to stakeholder pressures in global projects. *International Journal of Project Management*, *27*(2), pp.131-141.

Aapaoja, A. and Haapasalo, H., 2014. A framework for stakeholder identification and classification in construction projects. *Open Journal of Business and Management*, *2014*.

Aaltonen, K., 2011. Project stakeholder analysis as an environmental interpretation process. *International journal of project management*, *29*(2), pp.165-183.

Adler, E.S. and Clark, R., 2014. *An invitation to social research: How it's done*. Cengage Learning.

Amadi, C., Carrillo, P. and Tuuli, M., 2020. PPP projects: improvements in stakeholder management. *Engineering, Construction and Architectural Management*, *27*(2), pp.544-560.

Armenia, S., Dangelico, R.M., Nonino, F. and Pompei, A., 2019. Sustainable project management: A conceptualization-oriented review and a framework proposal for future studies. *Sustainability*, *11*(9), p.2664.

Alias, Z., Zawawi, E.M.A., Yusof, K. and Aris, N.M., 2014. Determining critical success factors of project management practice: A conceptual framework. *Procedia-Social and Behavioral Sciences*, *153*, pp.61-69.

Ajam, M.A., 2014. *Redefining the Basics of Project Management: Filling the Practice Gaps by Integrating Pmbok® Guide with a Project Life Span Approach!*. AuthorHouse.

Aladpoosh, H., 2012. *The Effectiveness of Project Management by Stakeholders in Enhancing Project and Stakeholder Management* (Doctoral dissertation, Universiti Teknologi Malaysia).

Al-Khafaji, A.W., Oberhelman, D.R., Baum, W. and Koch, B., 2009. Communication in stakeholder management. *Construction Stakeholder Management; Wiley-Blackwell: Chichester, UK*, p.159.

Alshawabkeh, R., Rumman, A. A., Al-Abbadi, L., & Abu-Rumman, A. (2020). The intervening role of ambidexterity in the knowledge management project success connection. *Problems and Perspectives in Management*, *18*(3), 56.

Andersen, E.S., 2010. Rethinking project management–An organisational perspective. *Strategic Direction*.

Atkin, B. & kitmore, M., 2008. Stakeholder management in construction. *Construction management and economics*, *26*(6), pp.549-552.

Babbie, E. & Mouton, J. 2009.*The practice of social science research*. South Africa ed. Cape Town: Oxford University Press.

Babbie, E. & Mouton, J. 2010.*The practice of social science research*. South Africa ed. Cape Town: Oxford University Press Southern Africa.

Bal, M., Bryde, D., Fearon, D. and Ochieng, E., 2013. Stakeholder engagement: Achieving sustainability in the construction sector. *Sustainability*, *5*(2), pp.695-710.

Bell, E., Bryman, A. and Harley, B., 2022. *Business research methods*. Oxford university press.

Blumberg, B., Cooper, D.R, & Schindler, P.S. 2011. *Business Research Methods*.3rd Ed. London: McGraw-Hill Education.Bourne, L. and Walker, D.H., 2006. Visualizing stakeholder influence—Two Australian examples. *Project Management Journal*, *37*(1), pp.5-21.

Bourne, L. and Walker, D.H., 2005. Visualising and mapping stakeholder influence. *Management decision*.

Bourne, L. and Weaver, P., 2010. Mapping stakeholders. *Construction stakeholder management*, pp.99-120.

Bourne, L., 2005. Project Relationship Management and the Stakeholder Circle. Doctor of Project Management. *Graduate School of Business*.

Bruwer, JP.2010. Sustainability of South African FMCG SMME retail businesses in the Cape Peninsula. A dissertation submitted in fulfilment of the requirement for the degree Master of Technology: Internal Auditing at the Cape Peninsula University of Technology.

Bryman, A. & Burgess, R.G.1999.*Qualitative Research*.London:Sage.

Bryman, A. 2004.*Social research methods*. 2nd Ed. New York: Oxford University Press.

Brynard, P.A. & Hanekom, S.X. 2006. *Introduction to research in management-related fields*. Pretoria: Van Schaik.

Burns, R.B & Bush, R.F. 2005. *Basic marketing research: using Microsoft excel data analysis*. International Edition. Singapore: Pearson Prentice Hall.

Cargan, L. 2007. *Doing social research.* Lanham: Rowman & Littlefield Publishers.

Carroll, A.B. and Buchholtz, A.K., 2006. Business & Society: Ethics and Stakeholder Management. 6. painos. *Mason: Thomson/South-Western*.

Chinyio, E. and Olomolaiye, P. eds., 2009. *Construction stakeholder management*. John Wiley & Sons.

Crane, A. and Ruebottom, T., 2011. Stakeholder theory and social identity: Rethinking stakeholder identification. *Journal of business ethics*, *102*, pp.77-87.

Chinyio, E. and Olomolaiye, P., 2010. Introducing stakeholder management. *Construction stakeholder management*, *1*.

Chan, A.P., Scott, D. and Chan, A.P., 2004. Factors affecting the success of a construction project. *Journal of construction engineering and management*, *130*(1), pp.153-155.

Chinyio, E.A. and Akintoye, A., 2008. Practical approaches for engaging stakeholders: findings from the UK. *Construction Management and Economics*, *26*(6), pp.591-599.

Collinge, W.H., 2012. Re-thinking stakeholder management in construction: theory & research. *Project Perspectives*, *34*, pp.16-23.

Chan, L.L. and Idris, N., 2017. Validity and reliability of the instrument using exploratory factor analysis and Cronbach's alpha. *International Journal of Academic Research in Business and Social Sciences*, *7*(10), pp.400-410.

Collis, J. & Hussey, R. 2003. *Business Research: A practical guide for undergraduate and post graduate students*. Palgrave: Macmillan.

Collis, J. and Hussey, R., 2013. *Business research: A practical guide for undergraduate and postgraduate students*. Macmillan International Higher Education.

Creswell, J.W. 2012. *Research design: qualitative, quantitative, and mixed methods approaches*. London: SAGE.

Davis, K., 2014. Different stakeholder groups and their perceptions of project success. *International journal of project management*, *32*(2), pp.189-201.

Denscombe, M. 2007. 3rd ed. *Open Up Study Skills. The Good Research Guide for small-scale social research project*. New York: McGraw-Hill Education.

Dithebe, K., Aigbavboa, C.O., Thwala, W.D.D., Hayhow, S. and Talebi, S., 2021. Stakeholder management in the alleviation of legal and regulatory disputes in public-private partnership projects in South Africa. *Journal of Engineering, Design and Technology*.

Dorsten, L.E. & Hotchkiss, L. 2005. *Research methods and society: foundation of social inquiring.* Upper Saddle River, NJ: Pearson Prentice Hall.

DROB, C. and Zichil, V., 2013. Overview regarding the main guidelines, standards and methodologies used in project management. *Journal of Engineering Studies & Research*, *19*(3).

El Khatib, M., Alabdooli, K., AlKaabi, A., & Al Harmoodi, S. (2020). Sustainable Project Management: Trends and Alignment. *Theoretical Economics Letters*, *10*(06), 1276.

Elias, A.A., Cavana, R.Y. and Jackson, L.S., 2002. Stakeholder analysis for R&D project management. *R&D Management*, *32*(4), pp.301-310.

El-Sawalhi, N.I. and Hammad, S., 2015. Factors affecting stakeholder management in construction projects in the Gaza Strip. *International Journal of Construction Management*, *15*(2), pp.157-169.

Eyiah-Botwe, E., Aigbavboa, C.O. and Thwala, W.D., 2017. Critical success factors for enhanced stakeholder management in Ghana.

Emory, C. & Cooper, D. 1995. *Business Research methods*. Boston: Irwin.

Enshassi, A., Abdul-Aziz, A.R. and Abushaban, S., 2012. Analysis of contractors performance in Gaza strip construction projects. *International Journal of Construction Management*, *12*(2), pp.65-79.

Errida, A., & Lotfi, B. (2021). The determinants of organizational change management success: Literature review and case study. *International Journal of Engineering Business Management*, *13*, 18479790211016273.

Eskerod, P. and Huemann, M., 2013. Sustainable development and project stakeholder management: What standards. *International Journal of Managing Projects in Business*, 6 (1), pp.36-50

Eskerod, P. and Jepsen, A.L., 2013. Project Stakeholder Management, Gower Publishing Ltd. *Gower House, Croft Road, Aldershot, GU11 3HR, United Kingdom*.

Eyiah-Botwe, E., 2017. *Development of a Sustainable Stakeholder Management Framework for Construction Projects in Ghana*. University of Johannesburg (South Africa).

Eyiah-Botwe, E., Aigbavboa, C. and Thwala, W.D., 2016. Mega Construction Projects: using stakeholder management for enhanced sustainable construction. *American Journal of Engineering Research*, *5*(5), pp.80-86.

Findley, M. G., Kikuta, K., & Denly, M. (2021). External validity. *Annual Review of Political Science*, *24*, 365-393.

Freeman, R.E., 2010. *Strategic management: A stakeholder approach*. Cambridge university press.

Fontana, S., Coluccia, D. and Solimene, S., 2019. VAIC as a tool for measuring intangibles value in voluntary multi-stakeholder disclosure. *Journal of the Knowledge Economy*, *10*, pp.1679-1699.

Fummey, S.L., 2017. *Studies on Exploring Critical Success Factors for Stakeholders Management in Construction Projects in Ghana* (Doctoral dissertation).

Gudienė, N., Banaitis, A. and Banaitienė, N., 2013. Evaluation of critical success factors for construction projects–an empirical study in Lithuania. *International journal of strategic property management*, *17*(1), pp.21-31.

George, R. 2011. *Marketing tourism in South Africa*. 4th ed. Cape Town: Oxford University Press.

Gyadu-Asiedu, W., 2013. Towards a systemic construction industry development: a research agenda for a fragmented industry in Africa. *Journal of Construction Project Management and Innovation*, *3*(2), pp.680-696.

Gibson, K., 2000. The moral basis of stakeholder theory. *Journal of Business Ethics*, 26 (3), pp.245-257.

Gregory, A.J., Atkins, J.P., Midgley, G. and Hodgson, A.M., 2020. Stakeholder identification and engagement in problem structuring interventions. European Journal of Operational Research, 283(1), pp.321-340.

Glaser, B.& Strauss, A.1967. *Discovering grounded theory*. Chicago: IL.

Golafshani, N. 2003. *Understanding reliability and validity in qualitative research.* http://www.nova.edu./ssss/QR/QR8-4/galafshani.pdf [30 December 2017].

Grimble, R. and Wellard, K., 1997. Stakeholder methodologies in natural resource management: a review of principles, contexts, experiences and opportunities. *Agricultural systems*, *55*(2), pp.173-193.

Gudienė, N., Banaitis, A., Podvezko, V. and Banaitienė, N., 2014. Identification and evaluation of the critical success factors for construction projects in Lithuania: AHP approach. *Journal of Civil Engineering and Management*, *20*(3), pp.350-359.

Hair, J.F., Celsi, M., Money, A.H., Samouel, P., & Page, M. 2011. *Essentials of Business Research Methods.* New York: Wiley.

Hammad, S., 2013. Investigating the stakeholder management in construction projects in the Gaza Strip. *Unpublished master's thesis). The Islamic University of Gaza, Gaza, Egypt*.

Harris, F., 2010. A historical overview of stakeholder management. *Construction Stakeholder Management*, *159*, pp.41-55.

Hornstein, H.A., 2015. The integration of project management and organizational change management is now a necessity. *International Journal of Project Management*, *33*(2), pp.291-298.

Ivankova, N.V. 2014. M*ixed methods applications in action research.* Los Angeles: SAGE Publication Ltd.

Isa, N.K.M., Alias, A. and Abdul Samad, Z., 2014. Sustainability integration into building projects: Malaysian construction stakeholders' perspectives. *The Macrotheme Review*, *3*(3), pp.14-34.

Jepsen, A.L. and Eskerod, P., 2009. Stakeholder analysis in projects: Challenges in using current guidelines in the real world. *International journal of Project Management*, *27*(4), pp.335-343.

Jayasuriya, S., Zhang, G. and Jing Yang, R., 2019. Challenges in public private partnerships in construction industry: A review and further research directions. *Built Environment Project and Asset Management*, *9*(2), pp.172-185.

Koster, K., 2009. International project management. *International Project Management*, pp.1-392.

Karlsen, J.T., 2002. Project stakeholder management. *Engineering Management Journal*, *14*(4), pp.19-24.

Khan, J.A. 2011. *Research methodology.* New Delhi: APH Publishing.

Khine, M.S. ed., 2013. *Application of structural equation modeling in educational research and practice* (Vol. 7). Rotterdam: SensePublishers.

Kothari, C. R. 2004. *Research Methodology: Methods and Techniques*. Delhi: New Age International.

Kothari, C.R. 2004. *Research methodology: methods and techniques*. 2nd ed. New Delhi: New Age International.

Krishnan, A. and Ramasamy, R., 2011. The key financial and non-financial performance measures of manufacturing firms in Malaysia. *International Journal of Managerial and Financial Accounting*, *3*(4), pp.403-417.

Kumar, R. 2008. *Research methodology.* New Delhi: APH Publishing.

Leininger, M. 1991. Culture care, diversity and universality: A theory of nursing. New York: NLN.

Levy, P.S. & Lemeshow, S. 2013. *Sampling of populations: methods and applications.* 4th ed. Hoboken, NJ: John Wiley & Sons.

Lin, X., Ho, C.M.F. and Shen, G.Q., 2018. For the balance of stakeholders' power and responsibility: A collaborative framework for implementing social responsibility issues in construction projects. *Management Decision*.

Lincoln, Y.S. & Guba, E.G. 1985. *Naturalistic inquiry*. California:Sage Publications.

Lock, D., 2007. Project management (9e ed.) Gower Publishing.

Lock, I., 2019. Explicating communicative organization-stakeholder relationships in the digital age: A systematic review and research agenda. *Public Relations Review*, *45*(4), p.101829.

Li, H., Ng, S.T. and Skitmore, M., 2018. Stakeholder impact analysis during post-occupancy evaluation of green buildings–A Chinese context. *Building and Environment*, *128*, pp.89-95.

Li, Y., Song, H., Sang, P., Chen, P.H. and Liu, X., 2019. Review of Critical Success Factors (CSFs) for green building projects. *Building and Environment*, *158*, pp.182-191.

Leonidou, E., Christofi, M., Vrontis, D. and Thrassou, A., 2020. An integrative framework of stakeholder engagement for innovation management and entrepreneurship development. *Journal of Business Research*, *119*, pp.245-258.

Manowong, E. and Ogunlana, S., 2010. Strategies and tactics for managing construction stakeholders. *Construction stakeholder management*, pp.121-137.

Martinez, C. and Olander, S., 2015. Stakeholder participation for sustainable property development. *Procedia Economics and Finance*, *21*, pp.57-63.

Martinsuo, M., & Geraldi, J. (2020). Management of project portfolios: Relationships of project portfolios with their contexts. *International Journal of Project Management*, *38*(7), 441-453.

Mitchell, R.K. and Lee, J.H., 2019. Stakeholder identification and its importance in the value creating system of stakeholder work. *The Cambridge handbook of stakeholder theory*, *1*, pp.53-73.

Mok, K.Y., Shen, G.Q., Yang, R.J. and Li, C.Z., 2017. Investigating key challenges in major public engineering projects by a network-theory based analysis of stakeholder

concerns: A case study. *International Journal of Project Management*, *35*(1), pp.78-94.

McCombes, S. (2021*) How to Write a Thesis Conclusion/Checklist and Examples*. Available at: https://www.scribbr.com/dissertation/write-conclusion/ (accessed 10 August 2022).

Merriam, S.B. 2014. *Qualitative research: a guide to design and implementation*. 3rd ed. San Francisco, CA: John Wiley & Sons.

Miles, M.B. & Huberman, A.M.1994.Qaualittative data analysis. 2nd ed. California:Sage.

Mills, J. & Birks, M. 2014. *Qualitative methodology: a practical guide.* London: SAGE.

Mitchell, R.K., Agle, B.R. and Wood, D.J., 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of management review*, *22*(4), pp.853-886.

Missonier, S. and Loufrani-Fedida, S., 2014. Stakeholder analysis and engagement in projects: From stakeholder relational perspective to stakeholder relational ontology. International journal of project management, 32(7), pp.1108-1122.

Molwus, J.J., 2014. *Stakeholder management in construction projects: a life cycle based framework* (Doctoral dissertation, Heriot-Watt University).

Mok, K.Y., Shen, G.Q. and Yang, J., 2015. Stakeholder management studies in mega construction projects: A review and future directions. *International journal of project management*, *33*(2), pp.446-457.

Mouton, J. 2006. *Understanding Social Research*. 4th ed. Paarl: Van Schaik publishers.

Mugobo, V. 2013. Re-branding Zimbabwe: a transformative and challenging process. Unpublished D.Tech thesis. Cape Peninsula University of Technology, Cape Town.

Mashali, A., Elbeltagi, E., Motawa, I. and Elshikh, M., 2022. Stakeholder management challenges in mega construction projects: critical success factors. *Journal of Engineering, Design and Technology*.

Molwus, J.J., Erdogan, B. and Ogunlana, S., 2017. Using structural equation modelling (SEM) to understand the relationships among critical success factors (CSFs) for stakeholder management in construction. *Engineering, construction and architectural management*.

Newcombe, R., 2003. From client to project stakeholders: a stakeholder mapping approach. *Construction management and economics*, *21*(8), pp.841-848.

Nguyen, N.H., Skitmore, M. and Wong, J.K.W., 2009. Stakeholder impact analysis of infrastructure project management in developing countries: a study of perception of project managers in state-owned engineering firms in Vietnam. *Construction Management and Economics*, *27*(11), pp.1129-1140.

Nykiel, R.A. 2007. *Handbook of marketing research methodologies for hospitality and tourism*. Binghamton: The Haworth Press.

Novoa, A., Shackleton, R., Canavan, S., Cybele, C., Davies, S.J., Dehnen-Schmutz, K., Fried, J., Gaertner, M., Geerts, S., Griffiths, C.L. and Kaplan, H., 2018. A framework for engaging stakeholders on the management of alien species. *Journal of environmental management*, *205*, pp.286-297.

Nguyen, T.S. and Mohamed, S., 2018. Stakeholder management in complex projects.

Olander, S. and Landin, A., 2005. Evaluation of stakeholder influence in the implementation of construction projects. *International journal of project management*, *23*(4), pp.321-328.

Othman, E. and Ahmed, A., 2013. Challenges of mega construction projects in developing countries. *Organization, technology & management in construction: an international journal*, *5*(1), pp.730-746.

Olander, S., 2007. Stakeholder impact analysis in construction project management. *Construction management and economics*, *25*(3), pp.277-287.

Olander, S., 2006. *External stakeholder analysis in construction project management* (p. 159). Sweden: Lund University.Olatunde, N.A. and Odeyinka, H.A., 2021. Factors Influencing Stakeholder Management in Building Projects Procured by Private Corporate Organisations. *Journal of Engineering, Project & Production Management*, *11*(1).

Oliver, P. 2004. *Writing your thesis. Writing Your Thesis, pp.1-248.*.

Oppong, G.D., Chan, A.P. and Dansoh, A., 2017. A review of stakeholder management performance attributes in construction projects. *International journal of project management*, *35*(6), pp.1037-1051.

Osei-Kyei, R. and Chan, A.P., 2015. Review of studies on the Critical Success Factors for Public–Private Partnership (PPP) projects from 1990 to 2013. *International journal of project management*, *33*(6), pp.1335-1346

Oxford Advanced Learners Dictionary. 2010. 8th ed. Oxford: Oxford University Press.

Oyegoke, A.S., 2010. The contextual approach to stakeholder management in Finland. *Construction stakeholder management*, *159*, pp.65-74.

Ola-awo, W., Alayande, A., Olarewaju, G. and Oyewobi, L., 2021. Critical success factors for effective internal construction stakeholder management in Nigeria. *Acta Structilia*, *28*(1), pp.1-31.

PMI, 2013. *A Guide to the Project Management Body of Knowledge:* (PMBOK Guide). Project Management Institute, Newtown Square, PA. 5th edition.

Project Management Institute.2010. *A guide to the Project Management Body of Knowledge*. Newtown Square, Pennsylvania: PMI Publications.

Polonsky, M. & Waller, D.S. 2011. *Designing and managing a research project*. 2nd ed. Thousand Oaks, CA: SAGE.

Park, H., Kim, K., Kim, Y.W. and Kim, H., 2017. Stakeholder management in long-term complex megaconstruction projects: The Saemangeum project. *Journal of Management in Engineering*, *33*(4), p.05017002.

Portney, P.R., 1994. The contingent valuation debate: why economists should care. *Journal of Economic perspectives*, *8*(4), pp.3-17.

Punch, K.F. 2009. *Introduction to research methods in education*. London: SAGE.

Reed, M.S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C.H. and Stringer, L.C., 2009. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of environmental management*, *90*(5), pp.1933-1949.

Rowe, G. and Frewer, L.J., 2005. A typology of public engagement mechanisms. *Science, Technology, & Human Values*, *30*(2), pp.251-290.

Saunders, M.N., Lewis, P., Thornhill, A. and Bristow, A., 2015. Understanding research philosophy and approaches to theory development.

Saunders, M.N.K., Lewis, P. & Thornhill, A. 2009. *Research Methods for Business Students*. 5th ed. Edinburgh Gate: Pearson Education.

South African Construction. (2015) *A Report Highlighting trends in the South African Construction Industry (3 edn).* Available at https://www.pwc.co.za/en/assets/pdf/sa-construction-2015.pdf. (Accessed on 3 July 2022).

Singh, Y.K. 2010. *Research methodology*. New Delhi: APH Publishing.

Solanke, B.H., 2015. *Effective strategy for construction materials procurement during construction towards the enhancement of sustainable building production in Western Cape, South Africa* (Doctoral dissertation, Cape Peninsula University of Technology).

South African Concise Oxford Dictionary. 2002. 10th ed. Cape Town: Oxford University Press.

Srinivasan, N.P. and Dhivya, S., 2020. An empirical study on stakeholder management in construction projects. *Materials Today: Proceedings*, *21*, pp.60-62.

Sürücü, L., & MASLAKÇI, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, *8*(3), 2694-2726.

Smith, J. and Love, P.E., 2004. Stakeholder management during project inception: Strategic needs analysis. *Journal of architectural engineering*, *10*(1), pp.22-33.

Takim, R., 2009. The management of stakeholders' needs and expectations in the development of construction project in Malaysia. *Modern Applied Science*, *3*(5), pp.167-175.

Thomas, R. M. 2003. *Blending Qualitative and Quantitative Research Methods in Theses and Dissertations*. California: Corwin Press.

Tasmania, O. (2011) *Tasmanian Government Project Management Guidelines*. Available at: https://www.dpac.tas.gov.au/__data/assets/pdf_file/0029/108992/Tasmanian_Government_Project_Management_Guidelines_V7_0_July_2011_2.pdf (Accessed on 11 May 2020).

Tranfield, D., Denyer, P. & Smart, P. 2003. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management,* 14(13): 207-222.

Tabish, S. and Jha, K.N., 2011. Important factors for success of public construction projects. In *2nd International conference on construction and project management IPEDR. Singapore: IACSIT Press*.

Verhoef, M.J. & Hilsden, R.J. 2004. *Writing an effective research proposal.* http://www.ais.up.ac.za/health/blocks/block2/researchproposal.pdf [04 May 2017].

Walker, D.H., Bourne, L.M. and Shelley, A., 2008. Influence, stakeholder mapping and visualization. *Construction management and economics*, *26*(6), pp.645-658.

Walsh, M. & Wigens, L. 2003. *Introduction to research: foundations in nursing and health care.* Cheltenham: Nelson Thornes.

Watt, A.D., 2013. Does stakeholder involvement really benefit biodiversity conservation?. *Biological conservation*, *158*, pp.359-370.

Watt, A.D., 2013. Does stakeholder involvement really benefit biodiversity conservation?. *Biological conservation*, *158*, pp.359-370..

Weeks, J.R., 2020. *Population: An introduction to concepts and issues*. Cengage Learning.

Weiss, J.W., 2021. *Business ethics: A stakeholder and issues management approach*. Berrett-Koehler Publishers.

Welman J.C, & Kruger, S.J. 2001. *Research Methodology*. 2nd ed. Cape Town:Oxford University Press Southern Africa.

Welman, J. C., Kruger, F., & Mitchell, B. 2012. *Research methodology*. Cape Town: Oxford University Press.

Wagner Mainardes, E., Alves, H. and Raposo, M., 2012. A model for stakeholder classification and stakeholder relationships. *Management decision*, *50*(10), pp.1861-1879.

Wood, D.J., Mitchell, R.K., Agle, B.R. and Bryan, L.M., 2021. Stakeholder identification and salience after 20 years: Progress, problems, and prospects. *Business & Society*, *60*(1), pp.196-245.

Wuni, I.Y. and Shen, G.Q., 2020. Critical success factors for management of the early stages of prefabricated prefinished volumetric construction project life cycle. *Engineering, Construction and Architectural Management*, *27*(9), pp.2315-2333.

Westmarland, L. 2011. Researching Crime and Justice. New York: Routledges.

Winch, G.M., 2009. *Managing construction projects*. John Wiley & Sons.

Winch, G.M., 2010. Managing Construction Projects: an Information Processing Approach (2nd Editio).

Wojewnik-Filipkowska, A., & Węgrzyn, J. (2019). Understanding of public–private partnership stakeholders as a condition of sustainable development. *Sustainability*, *11*(4), 1194.

Wadsworth.Al-Khafaji, K., Tuljapurkar, S., Carey, J.R. and Page Jr, R.E., 2009. Hierarchical demography: a general approach with an application to honey bees. *Ecology*, *90*(2), pp.556-566.

Yang, J., Shen, G.Q., Ho, M., Drew, D.S. and Xue, X., 2011. Stakeholder management in construction: An empirical study to address research gaps in previous studies. *International journal of project management*, *29*(7), pp.900-910.

Yang, R.J., 2014. An investigation of stakeholder analysis in urban development projects: Empirical or rationalistic perspectives. International Journal of Project Management, 32(5), pp.838-849.

Yang, J., Shen, G.Q., Drew, D.S. and Ho, M., 2010. Critical success factors for stakeholder management: Construction practitioners' perspectives. *Journal of construction engineering and management, 136*(7), pp.778-786.

Yang, R.J. and Shen, G.Q., 2015. Framework for stakeholder management in construction projects. *Journal of Management in Engineering*, *31*(4), p.04014064.

Young, J.C., Jordan, A., Searle, K.R., Butler, A., Chapman, D.S., Simmons, P. and Young, T.L., 2016. *Successful project management*. Kogan Page Publishers.

Zikmund, W.G.,Babin, B.J., Carr, J.C. & Griffin, M.2013.*Business research methods*.9th ed.USA:Cengage Learning.

APPENDIX A: PERMISSION LETTER

WBHO

Construction Cape
A division of WBHO Construction (Pty) Ltd
WBHO House, 9 Logan Way, Pinelands, 7405
P.O. Box 38020 Pinelands 7450. South Africa
Tel: +27 21 532 5100 Fax: +27 21 531 8123
(e) wbhocape@wbho.co.za (w) www.wbho.co.za
Reg No. 1983/011953/07

15 September 2021

TO WHOM IT MAY CONCERN

RE: APPROVAL IN RESPECT OF REQUEST TO CONDUCT RESEARCH

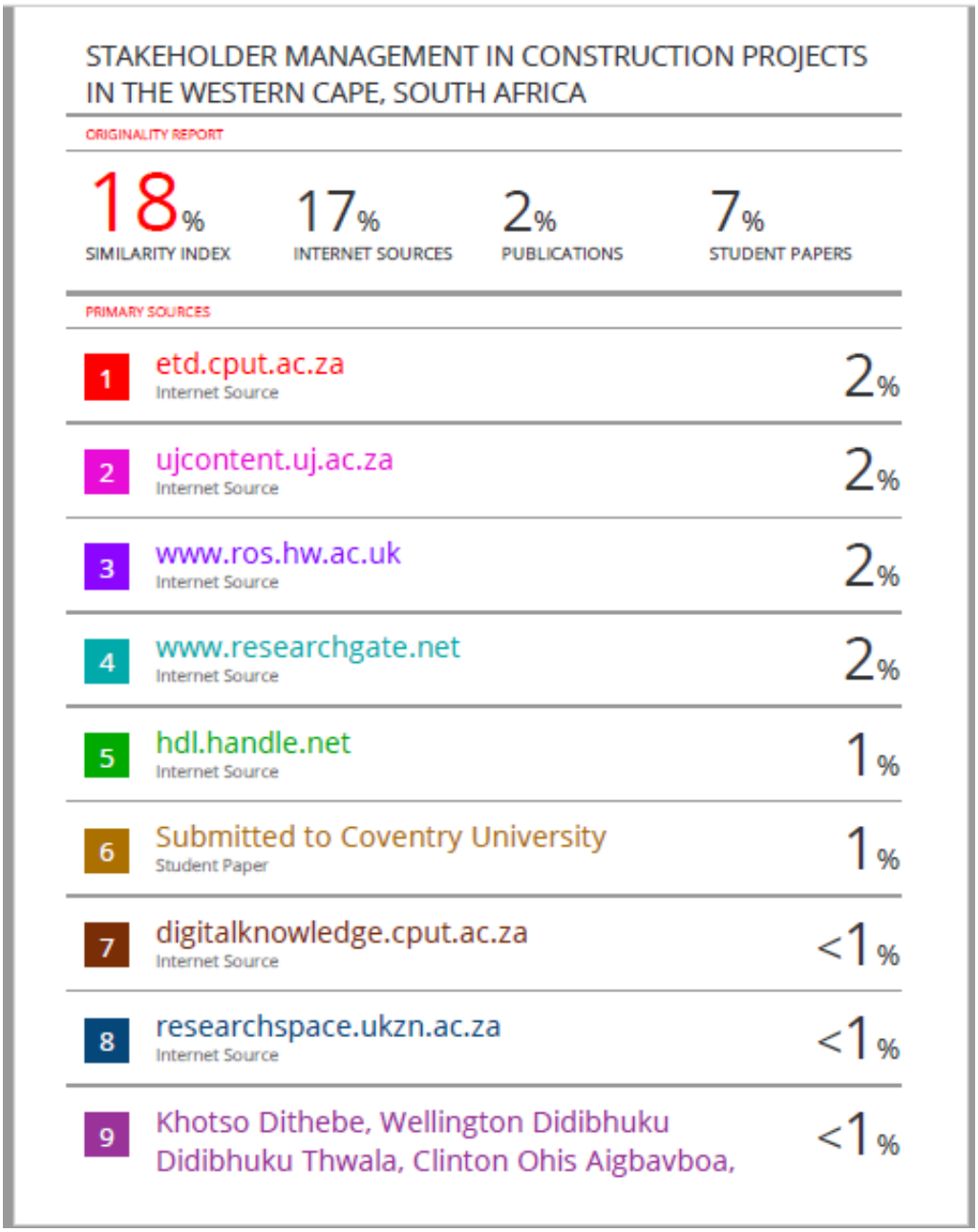
This letter serves to indicate that approval is hereby granted to Siyoni Jacisa with student number 213234173 to proceed with research in respect of the study Stakeholder Management in Construction Projects in the Western Cape, South Africa.

The onus rests with the researcher to negotiate appropriate and relevant time schedule to meet up with the company employees for questionnaire and interview if possible.

Yours sincerely

GEOFF BLIGHT
DIRECTOR

APPENDIX B: TURNITIN REPORT



STAKEHOLDER MANAGEMENT IN CONSTRUCTION PROJECTS IN THE WESTERN CAPE, SOUTH AFRICA

ORIGINALITY REPORT

18%	17%	2%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	etd.cput.ac.za Internet Source	2%
2	ujcontent.uj.ac.za Internet Source	2%
3	www.ros.hw.ac.uk Internet Source	2%
4	www.researchgate.net Internet Source	2%
5	hdl.handle.net Internet Source	1%
6	Submitted to Coventry University Student Paper	1%
7	digitalknowledge.cput.ac.za Internet Source	<1%
8	researchspace.ukzn.ac.za Internet Source	<1%
9	Khotso Dithebe, Wellington Didibhuku Didibhuku Thwala, Clinton Ohis Aigbavboa,	<1%

APPENDIX C: GRAMMARIAN CERTIFICATE

GRAMMARIAN CERTIFICATE

MELKOZAH CONSULTING PTY LTD

27 September 2022

Dear Sir/ Madam

Re: Confirmation of proof reading of dissertation for Siyoni Jacisa, Student Number 213234173.

This confirms that I have proof read and edited the dissertation titled, "***Stakeholder Management in Construction Projects in the Western Cape, South Africa***" and that I have advised the student to make the required changes before submission.

Yours faithfully

MELODY RUMBIDZAI KOZAH
Editor
melkozah@gmail.com
+27 78 398 7468

APPENDIX D: QUESTIONNAIRE

SECTION A: DEMOGRAPHICS

1. Gender						
Female		Male				
2. Age group						
Under 24		36-49				
25-35		50 Plus				
3.Highest Qualification						
PhD		Certificate				
Master's		Matric				
Degree/Honours		Below Matric				
Diploma		Other (specify)				
4.Race						
Black		White		Coloured		Other
5. Which industry does your company fall under?						
Construction		Events		IT		Other
6. How many employees are involved in projects?						
Less than 20		50-200				
20-50		more than 200				
7. Your experience						
Less than 5 years						
5 years less than 10						
10 years less than 15						
More than 15 years						

Section B: Stakeholders that are found and their interest in construction projects

From your knowledge and experience, how important is each of the following **Project Definition-related attributes** for ensuring the stakeholder management is a success?

no.	**Project Initiating and Planning (Definition)**	**(5)** Strongly agree	**(4)** Agree	**(3)** Neutral	**(2)** Disagree	**(1)** Strongly disagree
1	Excellent project feasibility study	☐	☐	☐	☐	☐
2	Clearly stated project objectives	☐	☐	☐	☐	☐
3	Good project location	☐	☐	☐	☐	☐
4	Detailed design	☐	☐	☐	☐	☐
5	Resisting project scope changes	☐	☐	☐	☐	☐
6	Clearly stated stakeholders needs	☐	☐	☐	☐	☐
7	Project Planning and Control	☐	☐	☐	☐	☐

Based on your experience, how important are each of the following in ensuring **Early Stakeholder Identification** and successful stakeholder management?

no.	**Early Identification and register**	**(5)** Strongly agree	**(4)** Agree	**(3)** Neutral	**(2)** Disagree	**(1)** Strongly disagree
1	Stakeholder identification occurs at the project definition stage	☐	☐	☐	☐	☐
2	Identify stakeholders at the design stage	☐	☐	☐	☐	☐
3	Identify stakeholders at the tender stage	☐	☐	☐	☐	☐
4	Having an expert staff to identify stakeholders	☐	☐	☐	☐	☐
5	Identify stakeholders at every stage	☐	☐	☐	☐	☐
6	All interested parties are identified before project design sign off	☐	☐	☐	☐	☐
7	Excluding all late stakeholders	☐	☐	☐	☐	☐
8	Reviewing an existing stakeholder list	☐	☐	☐	☐	☐
9	Having a directly designed register	☐	☐	☐	☐	☐

Based on your experience, how important are each of the following **Methods of identifying stakeholders?**

no.	**Methods of identifying stakeholders**	**(5)** Strongly agree	**(4)** Agree	**(3)** Neutral	**(2)** Disagree	**(1)** Strongly disagree
1	Personal experience	☐	☐	☐	☐	☐
2	Interviews	☐	☐	☐	☐	☐
3	Brainstorm	☐	☐	☐	☐	☐
4	Geographically	☐	☐	☐	☐	☐
5	Workshops	☐	☐	☐	☐	☐
6	Project meeting	☐	☐	☐	☐	☐
7	Involvement	☐	☐	☐	☐	☐

From your experience, how will you rank the importance of using each of the following **Stakeholder Classification Criteria** for ensuring the stakeholder classification is a success?

no.	**Stakeholder classification criteria**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Formal contract	☐	☐	☐	☐	☐
2	Positive contribution to the project	☐	☐	☐	☐	☐
3	Negative project influence	☐	☐	☐	☐	☐
4	Positive project influence	☐	☐	☐	☐	☐
5	Affected by project outcome	☐	☐	☐	☐	☐

Based on your experience**,** how important is each of the following incidence **of stakeholder classification composition** for ensuring the stakeholder management is a success?

no.	**Stakeholder composition attributes**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	High internal/low external relationships	☐	☐	☐	☐	☐
2	Low internal/high external relationships	☐	☐	☐	☐	☐
3	Similar internal/external relationships	☐	☐	☐	☐	☐
4	More proponent/ low opponent	☐	☐	☐	☐	☐

Based on your experience who are the **stakeholders in construction projects**?

no.	**Stakeholder in construction projects?**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Client	☐	☐	☐	☐	☐
2	Suppliers / Sub contractors	☐	☐	☐	☐	☐
3	Beneficiary / end user	☐	☐	☐	☐	☐
4	Regulatory authority	☐	☐	☐	☐	☐
5	Community	☐	☐	☐	☐	☐
6	Project team	☐	☐	☐	☐	☐
7	Project Managers	☐	☐	☐	☐	☐

Section C: Who are the most important stakeholders based on their impact on the project.

Based on your experience who are the **most typical key stakeholders in a construction projects?**

Typical key stakeholders in a construction project						
no.	**Typical key stakeholders**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Clients	☐	☐	☐	☐	☐
2	Community	☐	☐	☐	☐	☐
3	Contractors	☐	☐	☐	☐	☐
4	CEO/Sponsor	☐	☐	☐	☐	☐
5	Legislation	☐	☐	☐	☐	☐
6	Project team	☐	☐	☐	☐	☐

Based on your experience, how important is each of the following classification of stakeholders based on their **Project Involvement** for ensuring stakeholder management is a success?

no.	**Project Involvement Impact**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Role in the project	☐	☐	☐	☐	☐
2	Responsibilities in the project	☐	☐	☐	☐	☐
3	Level of participation	☐	☐	☐	☐	☐
4	Level of commitment	☐	☐	☐	☐	☐
5	Level of contribution	☐	☐	☐	☐	☐

Based on your knowledge, how important is each of the following prioritization of stakeholders based on **stakeholder attributes** for ensuring stakeholder management process is a success?

no.	**Stakeholder Power Attributes**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Power to influence decisions	☐	☐	☐	☐	☐
2	Urgency of need	☐	☐	☐	☐	☐
3	Legitimacy to demand need	☐	☐	☐	☐	☐
4	Delegated power to influence	☐	☐	☐	☐	☐
5	Power, legitimacy, and urgency	☐	☐	☐	☐	☐

What level of priority will you give to the following stakeholder **non-power attributes** as having an impact on the stakeholder management success?

no.	**Stakeholder Non-Power Attributes**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Interest in the project	☐	☐	☐	☐	☐
2	View of project's importance	☐	☐	☐	☐	☐
3	Impact on the project	☐	☐	☐	☐	☐
4	Influence on the project	☐	☐	☐	☐	☐
5	Needs and expectations	☐	☐	☐	☐	☐
6	Dynamism and salience to project	☐	☐	☐	☐	☐
7	Has shares in the project	☐	☐	☐	☐	☐

Based on your experience, how important is using each of the following **Analysis Methods** for ensuring stakeholder management is a success?

no.	**Stakeholder Analysis Method**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Stakeholder map template	☐	☐	☐	☐	☐
2	Stakeholder position mapping	☐	☐	☐	☐	☐
3	Stakeholder network analysis	☐	☐	☐	☐	☐
4	Stakeholder circle method	☐	☐	☐	☐	☐

5	Power/ Interest matrix	☐	☐	☐	☐	☐
6	Power/ Influence matrix	☐	☐	☐	☐	☐
7	Influence/Impact matrix	☐	☐	☐	☐	☐
8	Importance/Influence- salience model	☐	☐	☐	☐	☐
9	Help/Harm-potential matrix	☐	☐	☐	☐	☐
10	Power/Proximity	☐	☐	☐	☐	☐
11	Power/ Importance matrix	☐	☐	☐	☐	☐

Based on your experience and knowledge, rate the following contributions of stakeholders to the success of the project?

no.	**Contribution of stakeholders to the project**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Providing Expertise	☐	☐	☐	☐	☐
2	Reducing and Uncovering Risk	☐	☐	☐	☐	☐
3	Increasing Project Success	☐	☐	☐	☐	☐
4	Granting Project Acceptance	☐	☐	☐	☐	☐

Section D: Factors affecting the stakeholder management in the construction projects

From your experience, how important is each of the following **external environment-related factors** for ensuring the stakeholder management is a success?

no.	**External factors**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Economic issues	☐	☐	☐	☐	☐
2	Cultural practices/influences	☐	☐	☐	☐	☐
3	Legal policies/legislation	☐	☐	☐	☐	☐

4	Ethics of firms/stakeholders	☐	☐	☐	☐	☐
5	Social behaviour/practices	☐	☐	☐	☐	☐
6	Political influences/policies	☐	☐	☐	☐	☐
7	Construction industry practices	☐	☐	☐	☐	☐
8	Labour agitations	☐	☐	☐	☐	☐
9	Absence of industry regulatory body	☐	☐	☐	☐	☐

The following list of factors relates to implementation, monitoring and feedback actions. Based on your experience/knowledge, what influence does each of these related actions have on successful stakeholder management?

no.	**Related actions**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Implementing fully, project feasibility brief	☐	☐	☐	☐	☐
2	Implementing fully, stakeholder needs plan	☐	☐	☐	☐	☐
3	Full implementation of stakeholder management objectives	☐	☐	☐	☐	☐
4	Implementation of stakeholder communication plan	☐	☐	☐	☐	☐
5	Monitoring project objectives achievement	☐	☐	☐	☐	☐
6	Monitoring stage activity and effectiveness	☐	☐	☐	☐	☐
7	Monitoring stakeholders need achievement	☐	☐	☐	☐	☐
8	Documenting the entire stakeholder process	☐	☐	☐	☐	☐
9	Implementing decisions on feedback	☐	☐	☐	☐	☐

Below is a list of stakeholder engagement methods that could influence effective communication. Based on your knowledge, what influence does each method have on successful stakeholder management?

no.	Engagement-related methods	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Adopting proactive communication	☐	☐	☐	☐	☐
2	Using open communication	☐	☐	☐	☐	☐
3	Using emails for correspondence	☐	☐	☐	☐	☐
4	Communicating using telephone	☐	☐	☐	☐	☐
5	Organizing stakeholder conferences	☐	☐	☐	☐	☐
6	Organizing stakeholder workshops	☐	☐	☐	☐	☐
7	Using social platforms	☐	☐	☐	☐	☐
8	Using planned communication	☐	☐	☐	☐	☐

The following list of factors relates to conflict resolution. Based on your experience/knowledge, what influence does each related factor have on successful stakeholder management?

no.	**Related factors**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Having the ability to predetermine possible conflicts	☐	☐	☐	☐	☐
2	Having the ability to resolve conflicts	☐	☐	☐	☐	☐
3	Having capacity to determine conflict type	☐	☐	☐	☐	☐
4	Stakeholders being willing to resolve conflict	☐	☐	☐	☐	☐
5	Embarking on early conflict resolution	☐	☐	☐	☐	☐
6	Ensuring fair play during resolution	☐	☐	☐	☐	☐
7	Ensuring transparency between stakeholders	☐	☐	☐	☐	☐
8	Ensuring that conflict resolution process is transparent	☐	☐	☐	☐	☐

Below is a list of possible indicator outputs of successful stakeholder management process. Based on experience or knowledge, what extent can each of the outputs be achieved, by adopting sustainable stakeholder management?

no.	**Possible outputs**	(5) Strongly agree	(4) Agree	(3) Neutral	(2) Disagree	(1) Strongly disagree
1	Reduced project time	☐	☐	☐	☐	☐
2	Improved project quality	☐	☐	☐	☐	☐
3	Achievement of stakeholder satisfaction and needs	☐	☐	☐	☐	☐
4	Improved project delivery	☐	☐	☐	☐	☐
5	Early stakeholder identification	☐	☐	☐	☐	☐
6	Improved stakeholder collaboration	☐	☐	☐	☐	☐
7	Excellent communication	☐	☐	☐	☐	☐
8	Reduced conflicts	☐	☐	☐	☐	☐
9	Continuous key stakeholders support	☐	☐	☐	☐	☐
10	Good relationship and trust	☐	☐	☐	☐	☐
11	Well considered external environment factors	☐	☐	☐	☐	☐
12	Increase profit for stakeholders	☐	☐	☐	☐	☐
13	Increased project socio-economic benefit/value	☐	☐	☐	☐	☐

Below are the response strategy to deal with the stakeholder concerns. . Based on experience or knowledge, what extent can each of this strategies can be sustainable stakeholder management?

no.	**Strategy Types**	**(5)** Strongly agree	**(4)** Agree	**(3)** Neutral	**(2)** Disagree	**(1)** Strongly disagree
1	**Adaptation strategy**: Obeying the demands and rules that are presented by stakeholders.	☐	☐	☐	☐	☐

2	**Avoidance strategy**: Loosening attachments to stakeholders and their claims to guard and shield oneself against the claims.	☐	☐	☐	☐	☐
3	**Compromising strategy**: Negotiating with the stakeholders, listening to their claims related to the project and offering possibilities and arenas for dialogues.	☐	☐	☐	☐	☐
4	**Dismissal strategy:** Ignoring the presented demands of stakeholders. Not considering the stakeholder related pressures	☐	☐	☐	☐	☐
5	**Influence strategy**: Shaping proactively the values and demands of stakeholders.	☐	☐	☐	☐	☐

Thank you for your valuable contribution

APPENDIX E: INTERVIEW GUIDE

AIM OF THE STUDY: To determine the extent to which stakeholder management practice is being appreciated in construction projects.

You are invited to contact the researchers should you have any questions about the research before or during the study. You will be free to withdraw your participation at any time without having to give a reason.

Kindly complete the table below before participating in the research**.**

Tick the appropriate column		
Statement	Yes	No
1. I understand the purpose of the research.		
2. I understand what the research requires of me.		
3. I volunteer to take part in the research.		
4. I know that I can withdraw at any time.		
5. I understand that there will not be any form of discrimination against me as a result of my participation or non-participation.		
6. Comment:		

Please sign the consent form. You will be given a copy of this form on request.

Signature of participant	Date

No	QUESTIONS	CHECK
Are you currently working as a project manager in construction project and dealing with stakeholders?		
How long have you been a project manager in construction industry		
Now, we are going to talk about the stakeholder management in construction projects. Our discussion won't be that long, I got only seven questions. I just want your understanding from the subject under the investigation.		
1	Who are the stakeholders in construction projects and how are being better managed?	
2	Who are the most important stakeholders in construction projects and why?	
3	How one should engage stakeholders effectively?	
4	What tools do you suggest to be used to manage and engaged stakeholders?	
5	Identify key factors that affecting stakeholder management?	
6	Identify key factors that contribute to the success of stakeholder management?	
7	What opportunities and challenges do stakeholders present to a firm?	

THE END, THANK YOU.

APPENDIX F: ETHICAL CLEARANCE

Cape Peninsula University of Technology

FACULTY RESEARCH ETHICS COMMITTEE
Business and Management Sciences Faculty
Ethical Considerations Questionnaire (REC 5)

	Please Tick
Statement A: I consider that this project has **NO** significant ethical implications to be brought before the Faculty of Business Ethics Committee .	x

	Please Tick
Statement B: I consider that this project may have ethical implications that should be brought before the Faculty of Business Ethics Committee, and/or it will be carried out with children or other vulnerable populations. **If you select this Statement please ensure that you outline clearly the ethical issues in your proposal.**	

If you ticked Statement B then please provide all the further information listed below in a separate attachment.

1. Your Name
2. Title of project
3. Purpose of project and its academic rationale.
4. **Full** description of methods and measurements
5. Participants: recruitment methods, number, age, exclusion/inclusion criteria
6. Consent and participant information arrangements, debriefing.
7. **Please attach intended information and consent forms.**
8. A clear but concise statement of the ethical considerations raised by the project and how you intend to deal with them.
9. Estimated start date and duration of project.

This form (and any attachments) should be submitted to the Faculty of Business Ethics Committee where it will be considered. **If any of the above information is missing, your application will be returned to you.**

RECOMMENDATION

1. I (student and/or supervisor) am familiar with the ethical practices in research.
2. I am familiar with the Cape Peninsula University of Technology Guide to Post Graduate Studies and Guidelines for Research Proposals.

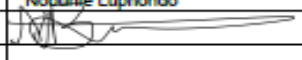
Undergraduate/Postgraduate Researcher(s) or Student	
Name	Siyoni Jacisa
Number	213234173
Signature	
Date	01-10-2021

APPROVAL

	Lead Researcher/Supervisor	Head of Department

Cape Peninsula University of Technology

FACULTY RESEARCH ETHICS COMMITTEE
Business and Management Sciences Faculty
Ethical Considerations Questionnaire (REC 5)

Name	Stanley Fore	Nobuhle Luphondo
Signature		
Date	05-10-2021	05/10/2021