THE IMPACT OF STAKEHOLDER COMMUNICATION ON THE QUALITY OF FACILITY MANAGEMENT PROJECTS AT A LIFE ASSURANCE COMPANY IN THE WESTERN CAPE, SOUTH AFRICA.

by

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DECLARATION

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

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Signed   **Date**

Abstract

In past, the impact of communication on project quality did not receive considerable attention, perhaps since the inception of project management as the field of enquiry. This is in spite of the fact that the Project Management Body of Knowledge (PMBOK) has nine knowledge areas, and amongst these elements, communication is regarded as an integral part of these aspects of project quality. While (in principle) communication is regarded as a core element of project quality, in practice, the four core elements, which are used to determine the success of the project are time, cost, scope, and quality. This study aims to investigate the effects of communication on project quality with reference to the Facilities Management Project at a the Life Assurance Company located in Cape Town, Western Cape, South Africa. The services, which are offered by facility management companies differ across the spectrum of companies, but most of these services include build operations, maintenance, real estate, human and environmental factors , project management, space planning, basic management activities, finance, quality assessment, communication and general administrative support. The major question that the study seeks to address is to determine if stakeholder communication impacts on the quality of projects at all.

The research used qualitative methodology research design to approach data collection and analysis, which was supported by survey questionnaires to analyse the effect of communication on Facility Management project quality. In this context, project quality is determined by the extent to which project outcomes meet the needs and expectations of project-end users. The researcher argues that these expectations must be communicated in order to improve the success of the project (i.e. project quality). With regard to the FMU project at the Life Assurance Company, the study revealed that stakeholder communication is crucial and hence it is a core essential element, which affects the quality of FMU projects.

The study also revealed that in recent years, tenants have expressed their dissatisfaction about projects that are executed by the facility management division. The major problem for the tenant's dissatisfaction appeared to stem from the lack of stakeholder communication during facility management projects. This dissatisfaction has led to tenants rating facility management projects quality as poor. In view of these challenges, the study thus concludes

with an analysis of stakeholder communication at the life assurance company and its impact on the quality of facility management projects.

The findings of the study suggest that communication amongst stakeholders is crucial and can affect the quality of projects. Even though tenants were the custodians of the facility management projects, they only received limited information during the project life cycle. In some instances, communication in the form of layout design, held desk and telephone, were identified as major communication channels that are used to facilitate communication. However, there was a lack of communication with respect to decision-making about the project across the project lifecycle and thus the study recommended that stakeholder communication should occur in all project phases.

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List of Abbreviations and Acronyms

CCM	Change Control Management
CPM	Corporate Property Management
CPUT	Cape Town University of Technology
DFA	Development Facilitators Act
FM	Facility Management
FMU	Facility Management Unit
GBC	Green Building Council
IFMA	International Facility Management Association
IT	Information Technology
LSD	Lift Service Providers
MSA	Municipal System Act
OHS	Occupational Health and Safety
OMCCII	Old Mutual Computer Centre
RMU	Ring Main Unit
SCM	Stakeholder Communication Plan
SDF	Development Frameworks Act
UPS	Uninterrupted Power Supply

Chapter One: Introduction

1.1 Introduction

The study investigates the impact of stakeholder communication on the quality of projects at a life assurance company in the Western Cape, with a specific focus on facility management projects. According to the International Facility Management Association (IFMA), facility management is "a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, processes and technology" (IFMA, 2012)

The services, which are rendered by facility management companies differ across the spectrum of companies, but most of these services include building operations, maintenance, real estate, human and environmental factors, project management, space planning, basic management activities, finance, quality assessment, communication and general administrative support. To achieve the objective of any project, the Project Management Body of Knowledge Principles (PMBOK) should be followed. This also applies to the area of facility management projects environment. The idea behind PMBOK is the application of knowledge, skills, tools and techniques for project activities in order to meet stakeholders' needs and expectations from a project. Thus, the purpose of the project is to meet stakeholders' needs and expectations (Burke, 2009:18).

1.2 Background of the study

Over the years, project managers have increasingly utilised various measures to determine the success of their projects. Gido and Clements (2012:24) indicate that project success has much to do with meeting the needs of the customer, and this concurs with Summers (2009:47) conception of project quality. As stated by Aaltonen, Jaako and Toumas, project managers must consider stakeholders' needs and requirements in order to ensure project success (Aaltonen, Jaako, & Toumas, 2008:509). Traditionally, project success assessment has often been technically driven by narrowly focusing on key factors such as time, cost and quality standards. However, emerging literature argues that the measurement of project success should go beyond technical confinement (Naqvi, Aziz, & -ur-Rehman, 2011:5824). For

example, some projects are completed within a specified time and budget, but fail because they compromise the needs of customers or intended project beneficiaries.

The Life Assurance Company, which is based in Pinelands, Cape Town, has a special unit that is dedicated to providing the above facility management functions. While the main task of this unit is to meet the needs of the company's clients, its recent Annual Survey Client Report 2013 see Appendix C states that clients are not satisfied with the quality of the facility management project that is rendered by this unit. For instance, clients continue to express concerns about the lux level being 300 luminar. It is not clear whether or not communication has any bearing on clients' dissatisfaction.

This research focuses on the facilities management project, which encompasses preparation of facilities' plans, planning, management of projects, programmes, design services, construction projects and relocation projects.

Selection of this project for the research study is motivated by a number of concerns, which are outlined below.

- Firstly, the projects have multiple stakeholders with different interests and expectations. Thus, it would be interesting to learn how these varying interests and expectations are communicated to improve project quality to a level, which would appeal to all interested and affected stakeholders.

- Secondly, there are a number of complaints, which relate to the quality of projects that are provided by the technical team (facilities). These complaints stem from different departments and individuals in various sections of the building. Thus, it is the intention of this research to explore the nature of these concerns, in particular, to find out whether or not the project scope was effectively communicated to the broader stakeholders from the outset.

- Thirdly, Facility Management (FM) stakeholders at the life assurance company request that project information should be conveyed equally to all stakeholders during the life cycle of the FM projects. What should to be addressed is to determine whether or not stakeholder communication is carried to all parties that are involved in the project during life cycle.

1.3 Problem statement

Facility management projects at a life assurance company are often completed within a specified time period and at a specific cost; however, there are on-going complaints from tenants expressing concerns that projects do not often meet their expectations. While most of these projects are successfully evaluated based on time, costs and resources, communication has not been incorporated into the evaluation.

1.4 Assumptions

- It appears that the major problem for this is communication.
- Two points are highlighted, which are research assumptions for this research: firstly, most facility management projects fail owing to miscommunication; secondly, communication impacts the quality of facility management projects and it should, therefore, be amongst the four core essential principles, which comprise project management.

1.5 Research questions

The following have been formulated as research questions for the present research study.
- Who are the stakeholders in facility management projects?
- What formal communication channels exist amongst the stakeholders that are involved in the facility management projects at a life assurance company in the Western Cape?
- How does stakeholder communication impact on the quality of projects at a life assurance company?

1.6 Objectives of the study

The main objective of the study is to investigate the effect of communication on the quality of projects with reference to facility management projects at a life assurance company, which is based in Cape Town. The sub-objectives of the study are:

1. To find out whether or not any formal communication channels exist amongst stakeholders that are involved in the selected facility management projects;
2. To find out how communication affects the stakeholder's circle; and
3. To determine the impact of communication on the quality of facility management projects.

1.7 Data analysis

Qualitative method was used to analyse data that was captured in this research. The method seeks to establish how human attach meaning to the world (Q Al-Busaidi,2008:11) Data analysis is the process through which the researcher continually reflects on collected data, moving towards understanding and representing the data, and deriving an interpretation of the larger meaning of the data (Creswell, 2003:190). Thus, the data that was collected was sorted and classified according to themes that arose from the responses of participants (Neuman, 2006:468), while the themes were used to highlight common issues that emerged from the interviews (Flick, 2007:63). The focus was not only on common issues, but also highlighted differences in the experiences and meanings, which were expressed by participants. The purpose of reflecting on the differences is "not to be selective, but that data should be reported in full" (Mouton, 1996:177). The collected data contained graphs, tables and numeric figures (relevant to the study), then these data sets was be interpreted qualitatively.

1.8 Ethics

This study was framed by the following ethical issues:

- **Access:** The life assurance company's management was consulted and informed in detail about the purpose of the study, the extent of time of the study and how the findings of the study would be disseminated and used. A letter of consent was requested from the life assurance company to submit to the HDC committee for approval. (See Appendix C)

- **Informed consent:** The researcher explained in brief, and in appropriate terms to participants, what the study is about and why it was undertaken. Furthermore, the

researcher ensured that participants consent was obtained before commencement of the interviews. This also applied to the use of data-gathering devices such as digital recorders and note-taking.

- **Anonymity and confidentiality:** The researcher also ensured that research participants were afforded anonymity and confidentiality, where they had requested this. Participants were not requested to indicate their names and their information was evaluated by the researcher only. Thus, any confidential information that was given by research participants was treated as such.

Reliability: To ensure the accuracy of the collected data, the researcher conducted follow-up interviews, where necessary, and used multiple sources of data.

1.9   Outcomes and contribution of the research

Every project manager's objective is to complete a project on time within an approved budget and according to a specified scope; if the project has met all three, but the stakeholders are not satisfied with the quality of the project, then the project will be deemed a failed project. The research sought to highlight how stakeholder communication can improve the quality of the project. The research will also contribute publishing a research paper in the Project Management knowledge and Facility Management knowledge areas.

1.10 Study layout

Chapter 2 discusses reviewed literature on the impact of stakeholder communication on facility management projects. The literature discusses different concepts concerning the history of project management, successful projects, communication, stakeholders, and quality.

Chapter 3 explains the methodology, which was used to gather data, and also discusses how population, ethical considerations, strengths and limitations, as well as reliability and validity of the study were addressed.

Chapter 4 addresses the analysis and findings of the collected data from all participating stakeholders that were involved in the research.

Chapter 5 offers conclusions and recommendations for the study. It also shows whether the researcher was able to prove that stakeholder communication affects the quality of projects. A recommendation concerning future areas of research was highlighted also in this chapter.

1.11 Summary

A qualitative, case study approach was used to conduct the research. All stakeholders that were used have been part of facility management projects at the life assurance company in the Western Cape, South Africa.. The emphasis on project success is mainly based on time, scope, and cost, but in order to achieve all these communication should be prioritised. The feedback that was received from the literature and the collected data should answer the above query.

Chapter Two: Literature review

2.1   Introduction

The purpose of this chapter is to provide a literature review, which relates to communication and stakeholder engagement in respect of project and project quality. Prior to presenting this review, it is critical to remind the reader of the aim of the study. The main purpose of the study is to investigate the effects of stakeholder communication regarding the quality of projects with reference to facility management projects. This focus draws on the two important concepts that require in-depth analysis of the study, namely stakeholder communication and project quality. Each of these concepts are defined and discussed in detail to provide a framework within which to conceptualise the study. As mentioned in the introductory chapter of the thesis, the academic research enquiry, which narrates the linkage between stakeholder communication and project quality, is limited. This limitation is particularly acknowledged by researchers such as the Project Management Institute (2013:2) and others, when they argue that the communication of data and information in a project is essential.

While there is significant recognition of the role of communication in a project from a scholarly point of view, the concepts of stakeholder, as it relates to communication, is predominantly neglected. Historically, project quality assessment had always been conceptualised as a technical undertaking with an assumption that project quality can be deduced through technical intervention. It is thus within this context that this chapter first provides literature, which traces the origin and development of project management from a historical perspective. The review pays particular attention to the practical application of project management (as a field of enquiry) with specific reference to how project quality has been conceptualised over time. The study also identifies different types of stakeholders within the context of facility management projects in a life assurance company, which is located in the Western Cape Province of South Africa. Each of the stakeholder types will thus be located in terms of their level of importance.

2.2 Historical context: The rise and fall of Technocratic Project Management

The story of project management, as a field of enquiry, began in the mid twentieth century when there was an increasing demand to visit the moon. As Stretton (1994) in Crawford, Pollack and England (2006:176) notes, the 1950s was signified by the emergence of project management, which offered a wide range of practical options to technical challenges that were faced at the time. These authors cast their postulation on the history by stating that in the 1950s the network analyses techniques, PERT (Program Evaluation Review Technique) and CPM (Critical Path Method), were developed as an integral part of project management. In the 1960s the techniques became popular and were used in conjunction with C/SCSC (Cost/ Schedule Control System Criteria). It is thus critical to note that the project management decision making process was predominantly conceived as a technical operation with little consideration of humans as a key element of project management. According to Shenhar (1996), in Crawford *et al*. (2006, 176), the 1970s period was epitomised by an emphasis on the concept of teamwork in project management, and this notion of teamwork continued until the 1980s. While the 1980s witnessed the project management technique in this fashion, Stretton (2007:13) argues that the improvement was negligible, as more emphasis was placed on project organisation, project risk, and front end, as well as external influences on the projects, and initial work on the development of project management standards.

It is apparent that the whole conceptualisation of project management from the 1950s to the 1980s was narrow and too technical in nature, with little human dimension. This is because project management was informed by huge project undertakings such as the one that emerged in the era of the Egyptian pyramids and during the era of the construction of the Great Wall of China (Burke, 2009: 29). In fact, Burke's theory postulates that these projects were large and complex with high standards, but the only challenge with these ancient projects was that they did not have documented evidence. In addition, Knipe *et al*. (2002:3-4) argues that the history of modern day project management was developed to address highly technically charged project operations between the 1950s and 1960s in America and Britain. These projects were often initiated by the military to achieve the objective of aerospace projects. It is thus not surprising that these projects were essential based on the assumption that project, success can be realised through measurable outcomes, which are derived from technical or scientifically accepted criteria.

As a result of the modernist ideologically intervention, Stretton (2007:10-11) argues that in the 1970s project management continued to grow in high technological companies outside of defence and construction. According to Burke (2009:36), this era was characterised by problems of the use of distinctive technocratic-oriented tools and techniques, which became imminent, and consequently, many of these projects failed. Various scholars argue that the failure was more acute among public sector projects, and as Burke (2009:36) explains, this was owing to poor project definition, poorly defined project organisation structure, and failure to consider the impact of external factors (stakeholders). Burke (2009:36) expresses that in the 1980s the influence of external stakeholders increased. Project management tools and techniques that proliferated in the 1960s were refined in the 1970s and were intergrated in the 1980s into acceptable practice. Around this period the integration of time, cost and quality was presented in a triangle. The theory of the triangle defines that one parameter could affect another, for example, if the project does not have enough time, quality might be compromised, which also affects the cost of the project. The triangle was later added by inserting scope as one of the factors

Time

Scope

Quality

Cost
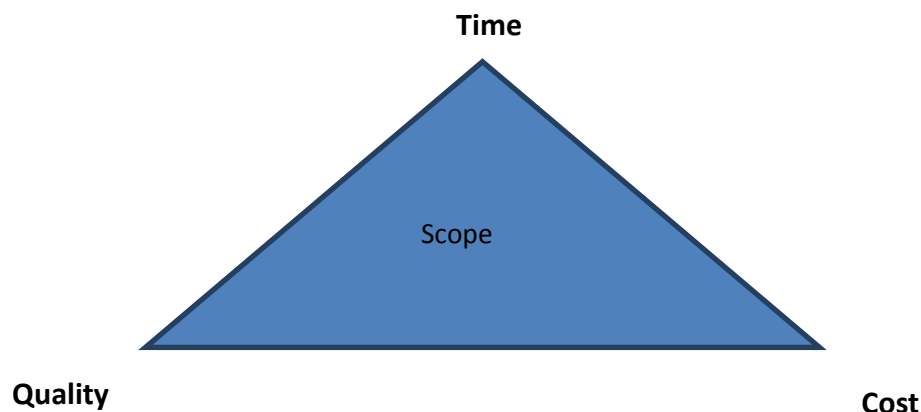
Figure 1: Four critical elements in project management (Knipe *et al* 2002)

Burke's review explains that in the 1980s the emphasis began to shift and focus more on the front-end of the project. This is where stakeholders' needs were analysed, feasibility studies were conducted, risk and uncertainty were assessed and product designs were conducted. Computers, along with the explosion of software were introduced in the 1980s (Burke 2009:38). In the 1990s organisation structures were introduced and companies introduced project management to operate new ideas. Total Quality Management emerged in the 1990s with more emphasis on the importance of clients, continuous improvement in a team and management through project life cycle. The 1990s also introduced PMO (project management

office) to manage projects and to develop a centre of project management excellence in companies (Kerzner 2010: 7-11)).

This section highlighted the history of project management by explaining how the nine knowledge areas were prioritised. Evidence from the historical materials presented thus far suggests that more emphasis has been placed on the technical aspects of projects to achieve the goal or the objective. According to Knipe *et al.* (2202:18), time, cost, quality and scope are classified as the four core elements because they determine the deliverables, while the other four, namely integration, human resources, communication, and procurement contracts are a means of achieving the deliverable objective. This notion of prioritization is established by the Project Management Body of Knowledge (PMBOK), which was established between 1987 and 2000. The study seeks to address that communication is a core element, which affects the quality of the end product, and its absence is likely to lead to project failure. The statement is supported by Oosthuizen *et al* (1998, 83) who argue that while the success of a project is often viewed to be determined by technical performance, effective communication is the key for successful implementation. The definition of project will determine whether communication is featured as an element within a project.

2.3   What is a project?

Nickson and Siddons (2001:2) define a project as a once-off finite piece of work with a fixed start and an end to achieve the set objective. The difference between projects and on-going work is that a project has a defined start and end, while other work offers continual activities. Kerzner (2006:2-3) also believes that a project is a unique endeavour, but explains that a project can be considered as a series of activities, which include a specific objective to achieve a specific goal; a defined start and finish; limited funds; human and none human resources; and is multifunctional.

Burke (2009:17) articulates that Project the Management Body of Knowledge (PMBOK) defines a project as a temporary endeavour, which is undertaken to create a unique product or service. Harrington and McNellis (2006:1) also define a project as a temporary endeavour, which is undertaken to create a unique product, service or results.
 Nicholas (2004:1) defines projects from the Webster New Dictionary as a proposal of something that should be done, plan: scheme, an organised undertaking with specific work.

Steyn *et al.* (2007:3) concur with Burke and Kerzner and state that a project is planned, and is a temporary attempt that is undertaken to create a unique product, service or other complete and definite deliverable within a limited time scale and with limited resources within a limited budget. Steyn *et al*. (2007:3) explain that a project requires the recruitment of resources from different disciplines to achieve a set goal. Portny *et al*. (2007) also state that a project is a temporary undertaking to create a unique service or product at a given time by using multidisciplinary resources, and is always conflict ridden. They mention that projects vary by their capacity, number of persons and team, degree of formality, whether it is internal or external, and by their contractual obligation.

Nicholson (2004:4) also concurs with other definition which state that a project is a list of activities with a specific purpose, complexity, uniqueness, unfamiliarity, stake and impermanence in a life cycle. Msengana (2012:4-5) is one of a few authors who argues that a project is a human activity that achieves a clear objective against time, cost and performance criteria. Msengana's theory establishes that the project manager is the single point of responsibility to achieve the goal of the project.

The scholarly reviews seem to have one common denominator when explaining what a project is, and what seems to be the focal point is meeting time, cost and quality, which supports the notion, which featured in the history of project management. The human factor, which in the case of this study is communication, does not reflect in the definition of a project. The question that one should ask is: will the human element feature in the definition or factors that make a successful project? The study reviews factors that make successful projects determine if communication is one of them.

2.3.1 What defines a successful project?

Nicholas (2004:534) defines a successful project as a project that satisfies its objectives. He states that there are two ingredients that make a project successful, namely commitment and involvement of key participants. Nicholas' theory suggests that top management commitment is essential for project success because it influences acceptance or resistance from others on the project, while project managers of successful projects are committed to meeting time, cost, safety and quality goals (in successful projects project managers are capable of administering the whole team and communicate effectively). Successful project teams are

teams with the right expertise and experience, while each individual is committed to achieving the set objective. Nicholas argues that successful projects are characterised by good communication and a high quality of information sharing and exchange (Nicholas, 2004:546). Nicholas raises an issue of the client, and he states that a successful project is a project that meets the needs of clients. The concern raised by Nicholas is that the success of the project cannot only be determined by project cost, schedule, and performance specifications; he states that measuring projects with these parameters may be misleading. The end item of the project's success will be determined by whether the customers' needs are met (Nicholas, 2004:542). Kerzner (2004:7) agrees and further illustrates that a successful project is a project with completion of activity within a specified time, cost and performance, but a broader measurement should be carried to determine project success. The three main actions mentioned by Kerzner (2009:366) for the measurement of successful projects include the project management team, the parent organization and the customer's organisation. Portny *et al*. (2008:4) concur with the definitions that have already been given, but emphasise that for a project to be successful, there are three core essential elements that must be achieved, namely outcome (project goal), schedule (project begins and ends specified dates) and resources (number of people, funds, equipment and facilities). All three core elements affect each other to achieve a successful project, as per the drawing below (Figure 2).
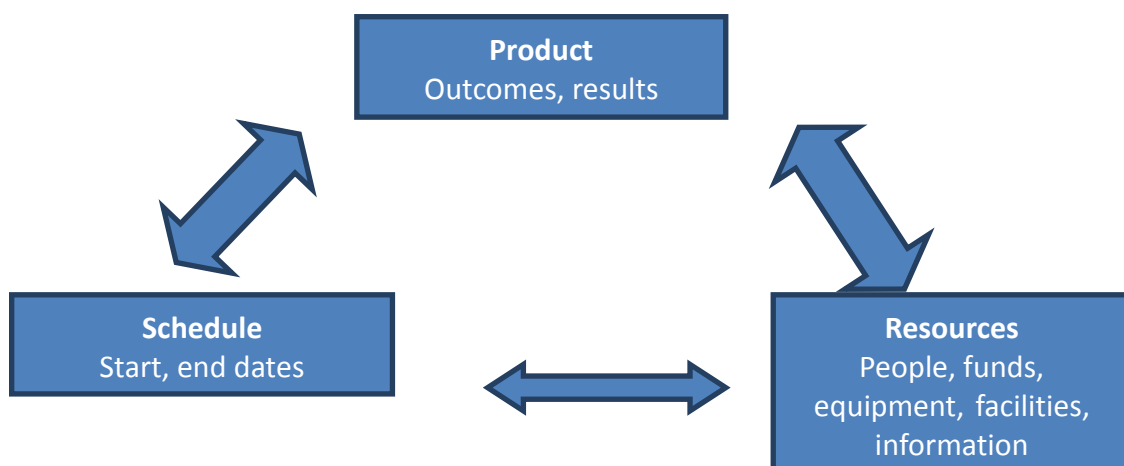
Figure 2: Three essential elements of any project (*Portny: 2008*)

These authors outline that the performance of the project and the effectiveness of the project manager is measured by the degree to which the goals are achieved (Portny *et al*, 2008). The theory of these authors contends that a project should meet the specifications that are set by

the client; the outcome of the project should be according to the goal of the project; and another factor, which these authors outline is the uncertainty of the project. This theory supports the notion that states that every project is unique, but the project should be able to deliver the objective in spite of the uncertainty that it encounters (Portny *et al*. 2008). Kerzner (2006:354) also makes a point that project success cannot only be measured by time, cost and performance parameters, and states that these parameters only consider profit, but does not address the issue of whether the project is successful. Kerzner's theory (2006:354) emphasizes that project success is measured by the actions of three groups: the project manager and team, the parent organisation, and the customer's organisation. The literature has defined that a successful project's common denominator or point of agreement, which is emphasized by the above authors, is the issue of clients. Likewise, Wateridge (1998:59) agrees that many authors have suggested that time, cost and user specifications are used as the three main criteria to achieve a successful project, but Turner in Wateridge also identifies that the project should be on time, within budget and to specifications as the standard mnemonic for judging success. Turner argues that the criteria needs should take into account the involvement of parties in the development process (Wateridge, 1998:59). Barker *et al.* in Wateridge (1998:59)) also argue that for a project to be declared successful, incorporating issues such as technical performance and satisfaction among various key people on the project: client, project team and users, are also essential.

Atkins (1999: 338) poses the question around whether the success criteria that had been used over the years to measure the success of the project is still efficient for today's projects. DeLone *et al*. in Atkins suggests that the measuring criteria should be decided by the four most important stakeholders namely, project manager, top management, and customer/client and team member (Atkins, 1999: 341). The definition of a successful project from different authors clearly states that it is not only time, cost and quality that make a successful project, but satisfaction of all stakeholders should be met, as the team should work as a team, and there should also be buy-in from management. One point that seems to emerge is that the client's needs or specifications should be met in order for a project to be declared successful. The literature has shown the similarities and differences that exist amongst different authors in terms of how they define the success of a project, but another question that should be addressed concerns, what project quality.

2.3.2   What is Project Quality?

Imagine a music event where the band and the artist have rehearsed so well, but the songs that they perform on stage do not appeal to the audience (Author, Mabatho Zungu, 2013).

The scenario narrated above is likely to trigger an argument with respect to what constitutes an acceptable objective standard to determine project quality. There is no one common definition of project quality that exists anywhere in the literature. The various definitions that exist differ not only in scale, but also in philosophy. The literature that was reviewed reveals a wide range of definitions of project quality from different philosophers. For instance, Dr. Armand Feigenbaum defines quality as what a customer says, and not what an organisation or company thinks. He stresses that quality is customer determination; that is, only a customer can decide if and how well a product or service meets his or her needs, requirements and expectations (Summers, 2009:49). Goff defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Goff, 2008: 1). In the context of the above case, namely the music event, the quality of the project may depend upon the audience to whom the product or service is rendered. Therefore, it is critical to note that the process of determining the quality of the project involves intensive communication with all project stakeholders, including the client.

Portny *et al.* (2007:6) define quality as specifications that are set by the client to achieve a goal. Carrutheners in Steyn *et al.* (2008:191) mentions that quality means different things to different people depending on their view point, but in a debate that has lasted for twenty years it has been agreed that quality means meeting the needs and the expectations, both expressed and implied, of the customer and the stakeholder. Kerzner (2006:833) argues that many organisations admit that they cannot define quality, because quality is defined by the customer. He states that Kodak defined quality as those products and services that are perceived to meet the needs and expectations of a product or service. Kerzner in Carrutheners narrates that projects arise owing to a need or upgrade of a system, product, or service. He states that the effectiveness with which the end-product of the project meets the needs that necessitated the project in the first place will determine the success or quality of the project. History tells us that in the 1960s many people struggled with a definition for quality, but Dr. Juran, a quality philosopher, clearly defines it as fitness for use. The quality of a project, product or service is determined by the level of satisfaction or, at worst, the level of

acceptance of the stakeholder. Quality of project, therefore, starts at the establishment phase, establishing the needs and, therefore, the brief of the scope, and flows through all phases of the project until close out (Carrutheners in Steyn *et al*., 2008:192). Burke also concurs by stating that PMBOK defines project quality management as a process, which is required to ensure that the project will satisfy the needs for which it was undertaken.

Dr. Deming (in Summers, 2009:28-45) also concurs with the above conception of project quality, as he argues that the consumer or the client is the most critical aspect in the production of a product or provision of a service. What is fascinating about his conception is that he emphasises that the views of the customer must be utilised to improve the quality of the project (Summers, 2009:28-45). With respect to the facility management project (case study of the research), it is not clear whether or not all the stakeholders' input that is gathered during the initial phase prior to when the project charter is handed to the project manager. Rose (2005:4-5) states that customers know quality when they see it. He stipulates that quality is the fourth of the triple constrains, which is associated with the scope because it defines what the customer wants.

The above literature depicts a significant shift away from the technocratic view of project quality to incorporate the human dimension as an important element of the project. Ramon and Cristobal (2009:1271) argue that the literature has mainly focused on analysing time and cost with little or no reported research focusing on models to optimize time, cost and quality jointly. Therefore, the recent literature has provided significant contributions to the area of project quality by recognising that people play a vital role in the success of the project. It is within this context that communication is acknowledged as a key factor, which affects project quality. The next section presents literature that focuses on a linkage between communication and project quality. It is critical to note that there is limited literature, which attempts to demonstrate the interactive nature of communication with project quality. The presentation also includes identifying a framework of stakeholders that is involved in the communication chain.

2.4   What is a stakeholder?

It is now clear that communication in a project is critical, especially when one begins to think about project quality. Therefore, this section pays particular attention to how stakeholders

interact in a project in order to advance their interests. But prior to this discussion, it is critical to revisit literature that focuses on the conceptualisation of a stakeholder within the context of project management. Various scholars have made enormous efforts to define the concept of a stakeholder. However, key to this literature discussion is how these definitions help us to understand the application of stakeholder communication in a project environment. For example, Aaltonen *et al*. (2008:510) state that the most common definition of project stakeholder is any group or individual who can affect or is affected by the project. While this definition appears to lack some basic conceptual elements, Freeman and Anderson in Jepsen and Eskerod (2007:335) agree with Aaltonen that a project stakeholder is a person who influences or is influenced by the project. Similarly, Nicholas (2004:496) also concurs with Aslton and Aaltone, as he argues that stakeholders are any group or individual(s) who can be affected by or has the potential to exert influence over the outcome of the project. While Larsson and Gray (2011:341) appear to be in agreement with the above notion of stakeholder, they, however, emphasise that the group of people and the organisation that is involved in the project may be positively or negatively affected by the project. It is fascinating that this definition of the stakeholder advances an idea that human involvement in a project plays a significant role.

Since the literature that was reviewed thus far shows that anyone who is involved in a project is a stakeholder, it is crucial to develop a deeper insight in order to understand different stakeholder groups, their involvement in projects and how each of these stakeholders affect the project outcome. This is critical since Nicholas argues that stakeholders have the potential to influence the outcome of a project. Based on the above argument, it is apparent that stakeholders have the potential to make the project fail or succeed. Therefore, the project manager should know who their stakeholders are and their role in the project, which entails communicating to the right people to achieve the objective or the goal of the project (Nicholas, 2004:496). This introduces the important concept of understanding roles and functions of stakeholders in a project.

There is limited literature that defines FM stakeholders, hence it is important to explain that FM can be rendered to different types of stakeholders. Heywood and Smith (2006:303) define Community FM project stakeholders as Council and Municipal stakeholders. Their theory stipulates that Council stakeholders comprises of council decision makers and council officials, while municipal stakeholders comprise of facilities users, neighbours and municipal

as a whole. What is important is that a community project FM acts on behalf of the client or their representative (Heywood and Smith, 2006:301). Chotipanich (2008:376) suggests that FM can be classified into three groups, FM strategy, FM real estate and business continuity. Figure 3 below illustrates the FM stakeholders that are involved in the three categories mentioned by Chitpanic.
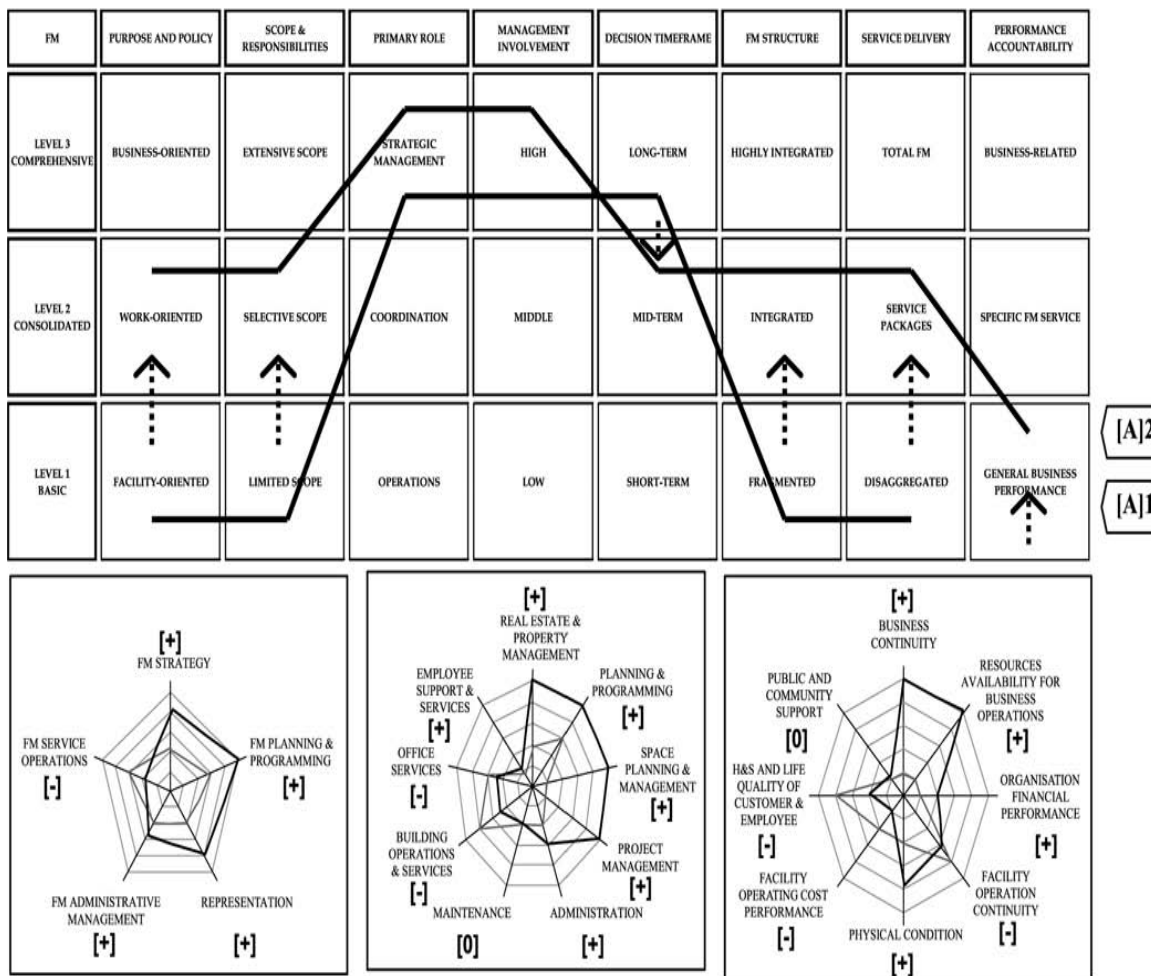
Figure 3: FM stakeholders (Chotipanich, 2008)

Barret and Baldry (2007) in Heywood and Smith ascertain that one of the stakeholder's roles that FM plays in the construction is either to be a client or a representative of the client. Their theory stipulates that connecting with stakeholders and their needs in a communicative

process has been defined as important for a successful FM service that bridges between those expectations and service delivery, which meets their needs (Heywood and Smith, 2006:301).

2.4.1 The role of stakeholders in a project

Contemporary literature within the field of project management increasingly focuses on the management of project stakeholders as an essential part of project management. With respect to the roles and functions of stakeholders in a project, various scholars argue that it is the duty of a project manager to consider the needs of stakeholders and their requirements (Aaltonen *et al.* 2008:510). In this context a project manager plays a mediating role and the function of the stakeholder is to maintain harmony for the success of the project. Jepson and Eskerod (2007:335) also agree that stakeholder management is an important issue in project management because a project can be seen as a temporary coalition of stakeholders to collectively achieve the objectives of the project. Therefore, it is apparent that though stakeholders have different roles and functions in a project, they must constantly work together to ensure that the outcome adheres to the interest of all stakeholders. Scholars such as Lepson and Eskeron (2007) developed a deeper insight by providing a framework within which to conceptualise stakeholders in a project environment. The theory that they provide suggests that the important component of stakeholder management is stakeholder analysis.

Stakeholder analysis, they argue, refers to the process whereby stakeholders are understood in terms of their role, power, legitimacy, function and interest. They further argue that in terms of analysing stakeholders, it is the ability of the project manager 'to anticipate problems and solutions in a project that is enhanced'. Thus, stakeholder analysis should occur at the time when the team still has the time and opportunity for direction. According to Bourne in Jepson and Eskerod (2007:336), 'effective project manager requires dedicated analytical and intuitive skills to identify stakeholders and work with them to understand their expectations and influence upon project successes'. He further argues that this concept assists a process that maximises stakeholder positive input, and hence minimises any potential detrimental input and effects in a project.

While these scholars have contributed enormously in terms of the application of stakeholder analysis in a project, Perrin's (2008:95) conceptualisation, however, moves beyond the stakeholder analysis concept by arguing that stakeholders are not managed, but what is managed instead, is how information is transmitted to stakeholders to enable them to

participate in a project. Perrin's concept concerns knowing one's stakeholders, understanding their needs and also listening to what they tell one. At a pragmatic level, Perrin (2008:60) notes that since stakeholders can kill or make the project, their involvement in the project is essential, but the key to keeping them in the loop is to constantly communicate. It is for this reason that the following section discusses aspects of stakeholder communication in a project. Jepson and Eskerod (2009:336) conclude that 'for the management to be efficient, it is thus also important for the project manager to understand the expectations of all stakeholders in the project'.

2.4.2   Stakeholder communication in a project

The language of democracy and participation has penetrated every part of the world. At a national level it may be with reference to civil society and good governance, while at a local project or activity level, it appears as commitment to satisfy project stakeholders. Barrow and Murphree (2001) state that this has been part of a fundamental shift in development and business thinking over the past twenty years, which seeks to move from being capital-centred to people-centred, and it is also based on the need for a radical shift in emphasis from external or expert professionals to stakeholder engagement. Currently, the need for participatory approaches is being embodied in project management within the context of property development project (DFA, 2003). If they are "properly mandated, empowered, and informed", project stakeholders/clients can "contribute to decisions that affect their needs in the project and play an indispensable part in creating a securely based sustainable project delivery" (IUCN, 1991:2). But the key question is how stakeholders communicate in a project to enhance the success of the project. Table 2.1 provides some answers regarding the type of communication, stakeholders and the effects that they have on the project.

Table 2.1, communication in the project environment varies from passivity at one extreme, to self-mobilization at the other. In general, participation through communication should strengthen the capacity of people to gain more responsibility for the service that is rendered to them. However, the concept of participation through communication conveys a wide variety of meaning and is used to cover many activities such as the provision of labour; setting the budget; materials or cash; involvement in problem identification; project planning and implementation; and partnership-related projects. White (1996) argues that this reflects the

many interests that different people have in terms of who participates, and the level of participation involved in the project.

Participation typology	Some components
Passive communication	Being told what is going to happen or has already happened. Top down, information shared belongs only to external professionals.
Communication in information giving	Answer questions posed by extractive researchers – using surveys, etc. People not able to influence.
Participation by consultation	Consulted and external agents listen to views. Usually externally defined problems and solutions. People not really involved in decision-making. Participation as consultation.
Communication by material incentives	Provision of resources, e.g. labour. Little incentive to participate after the end of the incentive.
Functional communication	Form groups to meet predetermined objectives. Usually done after major project decisions made, therefore, initially dependent on outsiders, but may become self-dependent, and enabling. Participation as organization.
Interactive communication	Joint analysis to joint actions. Possible use of new local institutions or strengthening of existing ones. Enabling and empowering, so people have a stake in maintaining structures or practices.
Self-mobilisation	Already empowered, take decisions independent of external institutions. May or may not challenge existing inequitable distributions of wealth and power. Participation as empowerment.

Table 2.1 How stakeholders communicate in a project (Source: Adams and Hulme, 2001:45)

A wide range of stakeholders may need to participate in the development of a project. It is likely that these stakeholders can have different perspectives and interests. Key issues may include: gender differences in terms of the way that men and women use resources; equity to improve conditions of the service, and their relations with the wealthy and powerful; decision makers at individual, organisational and group levels; and their relationship with the rest of the population.

As Barrow and Murphree (2001:45) argue, sharing through participation does not necessarily mean sharing in power. Participatory management styles give project stakeholders a voice but do not necessarily give voice to everyone. For instance, vocal expert stakeholders may dominate discussions. Are there people who are negatively affected by something that benefit others? Can all the different groups be consulted? Experiences have shown that the more varied the project stakeholders are, the more difficult it is to involve all members of the projects in decision-making. Therefore, participation cannot be merely wished upon project stakeholders. Rather, it must begin by recognising the "powerful, multi-dimensional, and in many instances, communications barriers or forces that dominate the lives of people involved in the project" (Barrow and Murphree, 2001: 45).

The conceptual discussion around project quality and stakeholder communication has been useful thus far to provide a framework to analyse the effects of communication on project quality. The hypothetical claim derived from the literature review states that communication has effects on the quality of the project. Hence, the literature discussion presented in this section also informed the data collection techniques that were used in the study. These techniques are identified and explained later in the thesis.
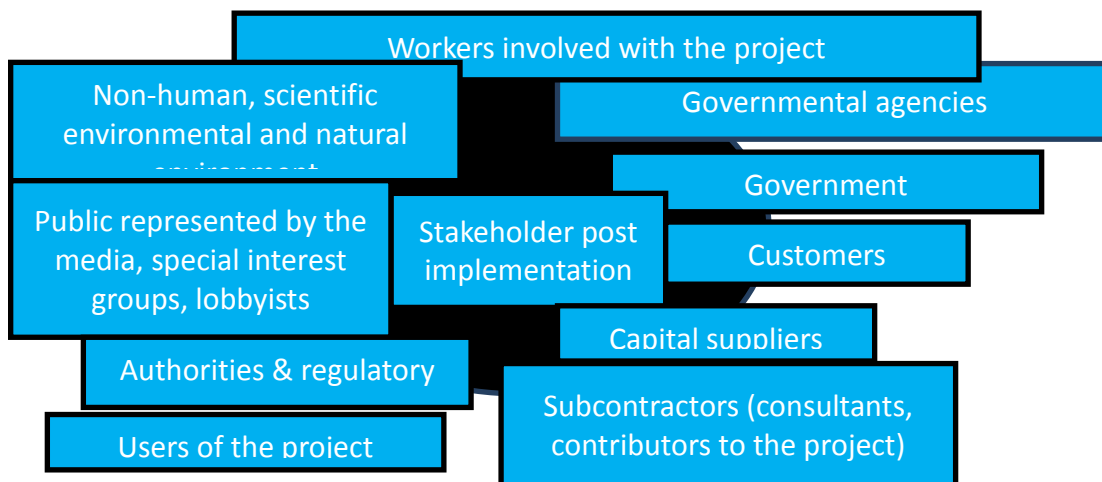
Figure 4: FM stakeholder circle (Mallak *et al*. in Atkinson 1999)

2.4.3 Stakeholder in facilities management project

Now that we have explored the concept of projects quality and stakeholders in the context of communication, it is important to provide a brief preview of the composition of stakeholder within the context of facilities management project.

Pickard (2010), an expert in Facility Management (FM), states that the facility management function has a longer list of stakeholders than any other part of the organization. According to him, FM stakeholders include directly employed staff, product suppliers, and service providers, building occupants, senior managers, investors, neighbors, unions, landlords, auditors and regulatory bodies (Mallak *et al.* in Atkison, 1999:340) (also refer to Table 1.3 above).

Like other scholars in the field of project management, Pickard argues that understanding the needs and wants of stakeholders is essential to the development and delivery of a successful facilities strategy. This involves performing an essential task that is to identify the rights and responsibilities of each stakeholder group in an FM project environment. Pickard also outlines an important point by stating that the needs of an FM stakeholder are things that they require in order to do the job. What is important at this stage is to communicate with the right stakeholders, and conveying proper information at the right time. The most important way to achieve meeting the needs of an FM strategy is to engage in a proper communication strategy (Pickard, 2010).

2.5 Communication in the project environment

Various authors are increasingly becoming aware of the value of communication in project management, particularly in relation to project quality. According to Mehta (2011), careful communication planning and setting the right expectations with all project stakeholders is critical. The project environment invariably entails a great deal of interaction among stakeholders. There are numerous ways to define project stakeholders. Aaltonen, Jaako, and Toumas (2008:509) define project stakeholders as any group or individual who can affect, or who are affected by the project. But before moving on to discuss this important topic, it is important to ask: What is communication? Like with project quality, there is no common definition of communication. Fawkes and Gregory (2000:118) define communication as,

essentially, the interpersonal process of sending and receiving a message. Prahanski and Benton (2004:41) also argue that communication is the glue that holds together a channel of distribution. Fawkes and Gregory's (2000:118) concept of communication demonstrates that the key component of the communication process (as depicted in Figure 4) involves the sender who encodes and sends (transmits) the message, and the receiver who decodes and interprets the message. The receiver then feeds back a response to the sender and closes the loop. The communication model focuses on each element of the process to identify what should happen to prevent misunderstanding– like "the charge of the Light Brigade was defeated in a notorious battle as a result of poor communication" (Burke, 2009:293).
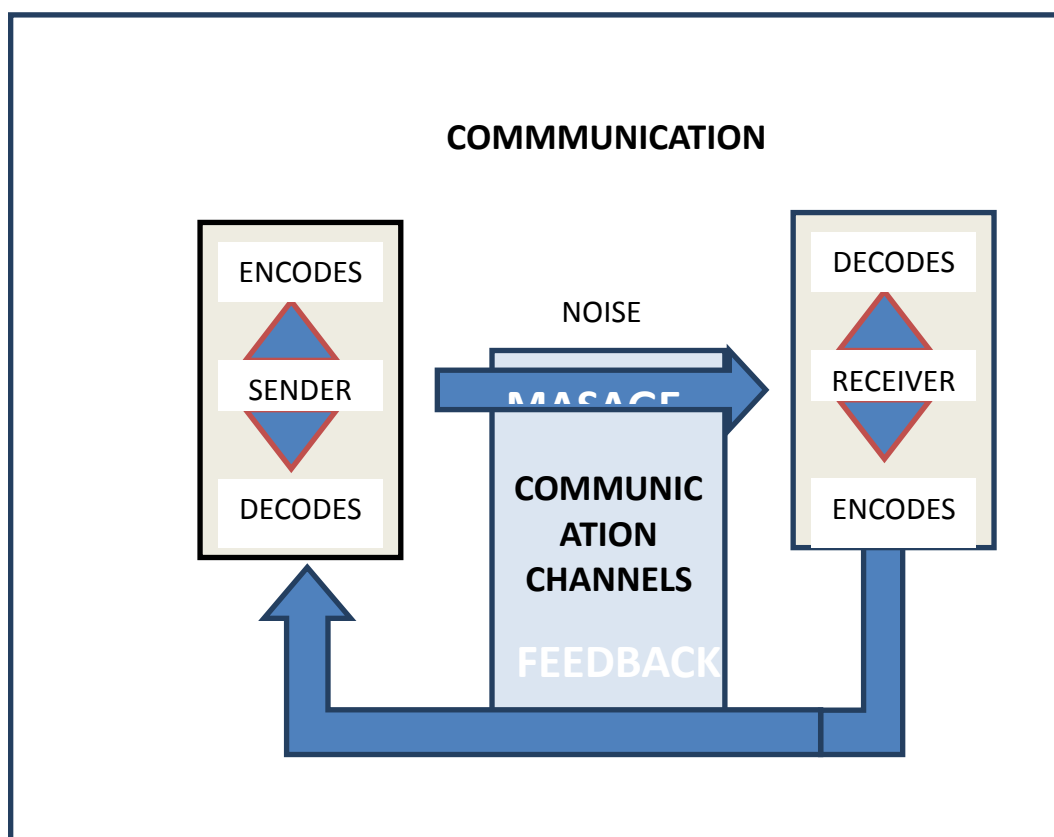
Figure 5: Model of interpersonal communication (Source: Duncan, 2005)

Another scholarly contribution to the concept of communication was provided by Burke who postulates that communication in the project management environment is the process that is required to ensure timely and appropriate generation, collection, and dissemination of project information. He then concludes that the communication process often provides a critical link among people, ideas and information to improve the success of the project. PMBOK emphasises that project communication should be conducted from the project manager to

clients, contractors, suppliers and other stakeholders (Watt, 2013). Burke further argues that project managers spend about 90% of their working time engaged in some communication, be it meetings, writing memos, emailing, faxes, reading reports, or talking with team members, senior managers, customers, clients, sub-contractors, suppliers and stakeholders. According to the explanation from PMBOK, project communication is ranked along with other knowledge areas, because, without effective communication, project success will be self-limiting (Burke, 2009:291-292).

Therefore, there is compelling evidence that communication plays an important role in the success of the project. This sentiment is also supported by Charvat (2002:1), as he notes that communication is the most important component in a project. In his view there are three clear communication channels that managers should establish in a project environment. Each of these channels is thoroughly narrated in the thesis for this research project.

In the literature reviewed above, scholars tried to locate, broadly, the role of communication in the project environment, with specific reference to project quality. While they have succeeded at this level, they appear to have failed to demonstrate how stakeholders (clients) may affect project quality through communication. The gap in the literature thus seems to be identifying how communication can be linked to the human element in terms of the quality of the project. Ramsing (2009:345) further notes that the defined communication channels for communicating project information among all the project stakeholders are to ensure that the project is aligned with stakeholders' needs and expectations. If these expectations are met, it is assumed that project quality will improve, irrespective of the amount of time and money that was invested in the project (Ramsing, 2009: 345-346)).

The major limitation, however, is that stakeholders tend to engage at a level that is commensurate with their importance to the project and the organisation (Aaltonen, Jaako, and Toumas, 2008:510). It is yet to be discovered whether or not facility management at the life assurance company engaged in robust interactive communication to influence the quality of their projects. It is not clear whether or not the tenants, who in this case are regarded as the clients, were not classified as key stakeholders, let alone the level of communication with them. As seen from the above literature, until the customer needs of stakeholders are met, the quality of the project and its success are not likely to be realised.

2.5.1   The value of communication

It is evident based on the above discussion that communication in a project is increasingly being ignored by project managers. Thus the core element of this study argues that effective communication is important to enhance the success of a project. Therefore, successful communication in projects should be focused on rather than broad-brushed and during this process timing is of crucial importance. Various authors argue that when communication is used effectively, it can reduce non-productive effort, avoid duplication and help to eliminate mistakes (Clarke, 1998: 140). But what communication are we referring to here? Benton and Prahinski (2004:41) describe communication as the glue that holds together a channel of distribution. Nagvi *et al.* (2011:5824) express that stakeholder communication is the process through which the project's scope, time and costs are interpreted, maintained and persuaded during project execution.

Ramsing (2009:345-346) maintains that stakeholder communication management is the function that drives the entire project throughout its life cycle (see also above sections). This is critical, as stakeholder communication drives all knowledge areas from initiation of a project until its close out. During the project's process life cycle, communication with the client enables the manager to learn project scope, time and cost requirements, while intra-team communication enables the project manager to address the project's performance (Nagvi *et al.* 2011:5825).

Heywood and Smith (2006:301) highlight that stakeholder communication is the key to success or failure of a project. Heywood and Smith (2006:301) theory continues to outline that project management remains effective only when there is effective communication for the team management. Kerzner in Ramsing concludes (2009:346) that effective stakeholder communication management is critical for the success of project. Oosthuizen *et al.* (1998:83) concur with Ramsing (2009:346) by stating that a successful project is determined by the technical performance and the cost schedule objective, but effective communication is the key to successful implementation.

Effective communication is vital for the successful execution of project management functions. The major challenge that exists in the current literature is that communication has not been identified as universally problematic, inappropriate, inadequate or ineffective

(Mintzberg in Oosthuizen *et al.* (1998:83). Effective communication is neither easy nor simplistic, argues Oosthuizen *et al*., while effective communication is a complicated and poorly understood process, and it is a direct cause of many a failed project. Baker (2007) in Ramsing (2009:346) makes an alarming statement by saying that 'when deadlines, expectations are not met, when customers are not satisfied, it is a result of poor human communication- not because Excel or any other information technology (IT) system fails in calculating a given situation'.

2.6   Conclusion

The conceptual and theoretical discussion around project quality and communication has been useful thus far to provide a framework to analyse the effects of communication on project quality. Within this important discussion it was highlighted that the concept of stakeholder and stakeholder analysis is crucial if one seeks to establish how stakeholder communication affects project quality. These concepts emerged after a rigorous literature analysis, which narrates the historical development of project management. It is thus clear that project management is no longer technically-centred, but there is an appreciation that humans are an integral part of project management. It is thus from this angle that the hypothetical claim derived from the literature review states that communication has effects on the quality of the project. Summarily, the literature discussion that was presented in this chapter will also inform the data collection techniques that were used in the study. These techniques are identified and explained in Chapter Three of this thesis.

Chapter Three: Research methodology

3.1   Introduction

The aim of this chapter is to describe the methodology that was adopted for the research. This includes the way in which the data was gathered and analysed. The first section addresses the philosophical position within which knowledge was constructed. In this section an explanation is provided regarding how the problem was identified and approached. This consideration leads us to the next section in which a discussion of the type of data that was collected and methods of data collection that were used is provided. The sampling method and its associated challenges are also discussed.

Thus, the methodology chapter addresses questions, which are raised in the study and these are:

- Who are the stakeholders at the life assurance company?
- What formal communication channels exist amongst the stakeholders involved in the facility management projects?
- How does stakeholder communication impact on the quality of facility management projects?

Data collection for the study was conducted by means of qualitative methodology. Unlike quantitative research methods, qualitative methodology seeks to establish how human attach meaning to the world (Q Al-Busaidi,2008:11). To locate this chapter within the scope of the study, it is critical to mention the aim of the study here. The aim of the study is to gather data to determine the effects of stakeholder communication on the quality of facility management projects at a life assurance company in the Western Cape, South Africa. Thus, the nature of the study and the research question that is sought to be answered by the study requires data collection methods that are not influenced by the positivist approach, which assumes that reality can only be understood through measurements and quantification, as indicated by Dixon-Woods *et al.* (2001:126). This is because the study seeks to understand the human behaviour to draw data on the research. As described by Salles, Bredeweg, Araujo and Neto (2003:292), qualitative simulations are detailed and articulate knowledge models that represent insights that humans have developed of systems and their behaviour.

3.2   Research philosophy and approach to the study

All research is underpinned by a philosophical approach (Mouton, 1990 and Robinson, 1998). The philosophy of qualitative research is based on the understanding that the researcher and the researched are closely related and inseparable (Dixon-Woods *et al.,* 2001:126). This means that the construction of knowledge through qualitative research is not value free. In this research project the researcher was not conceived as a neutral and totally rational person standing "out there" researching the phenomenon. According to this philosophical assumption, the researcher must try to get closer to the researched and seek to build up relationships with those that are studied. It is within this context that Patton in (Golasfshani (2003:600) argues that qualitative research uses a naturalistic approach that seeks to understand the phenomena in the context of specific settings such as real world settings where the researcher does not attempt to manipulate the phenomenon of interest. Thus, it is safe to argue that this research is located within the inductive research design. The formulation of the research design determines what would constitute appropriate evidence to address the problem (Mouton, 1990).

As Zungu (2003:63) argues, the form of reasoning that should be employed to address the problem that is identified should also be appropriate. In other words, the manner in which the problem is defined determines the kind of reasoning that is employed and the research design, which is required in a particular study. According to Kitchin and Tate (2000), there are two main types of research approaches that are employed in any scientific research, namely the deductive or hypothesis testing method and the inductive (sometimes called hypothesis-generating) method. The deductive route was not used in this study because it is used in physical scientific or natural scientific research, while an inductive method is often used in "human centred" science such as social science or commercial studies with a particular focus on humans as subjects of scientific enquiry. As in the case of this study, the research is entirely on human centred science because it seeks to determine how stakeholder communication impacts on the quality of facility management projects.

Unlike the deductive research design, the inductive approach starts from the "bottom line" of research with the collection of unstructured facts and slowly moves to the top rung of the research ladder. It is at this point that generalizations are made to explain facts and to create

patterns. Therefore, this research project began with problem identification and moved to the stage where it used a general theory, or theoretical setting, from which a research question and data needs were derived. In the case of this research the study sought to understand a real life situation in order to reach the results. The central concern of the study is to understand how stakeholders' communication affects project quality. Thus, the nature of the research question raised in the study provided the scope in which quantitative research design was not used because the study does not seek causal determination, prediction and generalization of findings, but rather illumination, understanding, and extrapolation of situations (Golasfshani, 2003:600).

3.3   Data collection methods

3.3.1   Primary sources

The study utilized quite a number of primary data sources. It is important to mention that if this data is collected in a thorough manner, the primary data sources can link harmoniously with secondary data (researched data). Interviews and personal communications related to the research are two important primary sources that the researcher used to understand the effect of communication on the FM project quality. Most importantly, the transcripts of interviews and the observation data are key primary sources in the research (see Appendix A). The annual survey report that was completed by tenants at the life assurance company was used to gauge the views of stakeholders (tenants) about the quality of Facility Management (FM) projects. The monthly reports drawn by the Facility Management's help desk were also used to identify areas of concerns from different stakeholders. Minutes of FM project meetings were also used to analyse the effect of communication on projects, and to also analyse matters arising owing to communication. All these documents formed the crucial parts of primary data sources for the study.

3.3.1.1   Interviewing process

Interviewing process techniques are widely used in many social science methodologies. In their most basic form, interviews are a conversational interaction between a researcher and informant (Welman et al, 2010:165). The research used two types of interviews, namely formal structured interviews, which were guided by questionnaires, and semi-structured

interviews, which were used to harness stakeholders prior to the formal structure interview. A formal structured interview is a more rigid interview structure, which does not allow an open-ended discussion between the interviewer and the interviewee. It is designed to obtain precise answers in order to answer the research question. This type of interview was crucial to ensure that the respondents' responses do not deviate from the theme of the interview. A semi-structured interview, conversely, allows discussion between the interviewer and the respondents whilst being guided by sets of questions. This type of interview was crucial in order to get informants to participate in the interviews. For instance, the researcher had to secure letters of approval from a range of stakeholders and this was first done by means of a semi-structured interview.

The purpose of the interview was to gather data (views) from Facility Management stakeholders who are involved in FM projects. These stakeholders include contractors, consulting engineers and suppliers, as well as the FM team (see Appendix B: list of stakeholders). It is crucial to mention that the theme of the interview was to probe the respondent to provide their perspectives on the quality of FM projects, as these relate to communication as the main focus of the study.

The questionnaire was divided into two sections:

The first part was for contractors, suppliers, engineers and tenants, while the other section was for facility managers and FM help desk agents. As mentioned above, prior to the drafting of the questionnaire (see Appendix A, a sample of the questionnaire), a meeting was held with facility managers and facility call centre agents. The purpose of this meeting was to find out their concerns with regard to the process of communication in facility management project processes. It is through this meeting that the researcher secured consent from the stakeholders to conduct the research. After the meeting the stakeholders agreed to draft letters, which stipulate the conditions of their participation in the research (see Appendix C: letters of consent from the stakeholders).

The questionnaire addressed the following issues:

- A profile to understand who is answering the question so that when looking into the project one might understand the stage in which the participant is involved.

- Project briefing was done in order to understand the type of communication method or channel that was used by the FM to communicate to contractors, suppliers, consulting engineers and a range of stakeholders who are involved in the project, but they are not part of the FM team based at the life assurance company.

- Communication during the project was also assessed to determine the method or channel, and also to establish if there was any communication barrier. The other reason for the section was to determine if there was any communication during FM projects. This formed a crucial aspect of the study, as the current literature states that project quality can be affected by communication barriers.

- The last section of the questionnaire addressed the issue of quality. Since the objective of the study was to determine if communication affects the quality of FM projects, the questionnaire addressed questions relating to how communication affects the quality of FM projects.

- The second section of the questionnaire was for FM and the Help Desk team, and the objective of this section was to determine the method, which FM used to communicate during the project process and how the communication impacts on the quality of their projects. The views of the facility managers are important in order to find out how they think the value of communication can improve the project outcome (project quality). It was crucial in order to see whether or not communication has any effects on the quality of their projects. For the FM team the questionnaire was an open ended one to allow the team to express their views, and also to highlight areas that are not addressed by the questionnaire. This type of interview (open-ended) also allowed the FM managers to draw on the historical nature of their projects in order to see how communication had affected this project over time.

3.3.1.2 Mail survey

One of the methods that were used to complete the questionnaire was via mailing. The questionnaire was mailed to all stakeholders (contractors, suppliers, consulting engineers, tenants and the FM team for them to complete. The advantage with this method is that the respondents were free to answer the questions without any fear of being victimised or loosing integrity within their respective organisations. This worked well as the researcher adhered to principles of confidentiality by not disclosing their views and identity (Dorsten & Hotchkiss,

2004). It is crucial to also mention that a mailing survey as a method was coupled with a snowball sampling technique, whereby stakeholders were requested to forward the questionnaire to any stakeholders who might be affected by the FM project. Stakeholders who were identified by means of a snowball sampling technique were later included on the mail list. Most of these stakeholders are engineers, suppliers and contractors who have done FM projects.

3.3.1.3   Interview focus groups

The focus group interview was another method that was used to gather data for this research. As discussed by Welma *et al.* (2010:201), the aim of the focus group is not to replace individual interviewing or questionnaire surveys, but to gather information that can perhaps not be collected by means of a questionnaire or interview. This method formed a crucial part of improving the validity of data that is collected by means of triangulation. The method was used to raise group discussion to highlight issues concerning communication during facility management projects. The focus group meeting consisted of five members of the life assurance FMU team. The participants in the FM team included help desk agents, help desk , facilities cleaning managers, facilities mechanical and electrical managers, facilities manager structural and the national technical manager.

While this method was useful collect valuable data for the study, the researcher was well aware of its limitations. One of the limitations of focus group interviewing is that powerful members are likely to dominate the discussion or further their interest at the expense of those who are less likely to assert themselves. Therefore, the researcher facilitated the discussion to ensure that all members participated equally. Prior to the discussion, the researcher allowed the participant to stipulate rules, which would guide the discussion and bind everyone in the group discussion. Prior to the discussion, the refreshments session was used as an ice-breaking tool to allow participants to mingle with one another before the meeting, as claimed by Powell & Single, in Higginson (2012:48). This also enabled the facilitator and research coordinator, who was also the note-taker, to introduce her to participants. Icebreakers were utilized as they made participants more comfortable and encouraged an atmosphere of honest discussion (Higginson, 2012:48). The questionnaire structure that was sent to stakeholders was used as a guideline to operate these meetings (see Appendix B: focus group questionnaire). The meeting was scheduled for one hour, but it lasted for three hours. A tape

recorder was used to record the discussions, while the researcher also took notes during the discussion.

3.3.2   Secondary data

For secondary sources, research reports from facility management surveys, peer reviewed academic publications, books, journals, and other articles from websites concerning the impact of communication on quality were reviewed to broadly develop an understanding of the topic. These sources were particularly useful in answering the research question; especially in respect of the impact of stakeholder communication on the quality of facility management projects. These secondary sources provided information about current theoretical or conceptual issues with regard to the effects of communication on project quality. Hence, it is for this reason that the researcher was able to use this information to identify gaps that exist in the current literature. More importantly, they helped the researcher to substantiate the argument in order to answer the research question.

3.4   Case study approach and targeted population

3.4.1   Case study of the life assurance company

The case study method was used as an approach to the study because a specific unit was analysed and studied intensively (Wolman *et al.*, 2010). The case study for the research was the Facility Management Unit of a life assurance company located in Cape Town, Western Cape. In this case the facility management stakeholders included facility managers, national technical manager, contractors, suppliers, consulting engineers, assets managers and tenants; this is the group that the study used as a unit of analysis. Yin in Nor (2008:1602) suggests that the word case refers to event or entity, even an individual or unit analysis, while Anderson in Nor (2008) also suggests that the case study is concerned with how and why things are done. In this case, the facility management stakeholders included facility managers, a national technical manager, contractors, suppliers, consulting engineers, asset managers and tenants; this is the group that the study used as a unit of analysis.

An advantage with the case study is that the uniqueness and the complexity of facility management projects are taken into account (Wilma *et al*. 2010). One of the reasons why the

case study method worked for this study was the fact that it would be a fruitless exercise to study the whole organisation. Instead, the study was designed in such a way to concentrate on a particular division, namely facilities management projects in order to understand how communication affects project quality in the particular locality.

While the case study approach was useful in the study, one cannot ignore its limitations. For instance, authors such as Johnson in Nor (2008: 1603) emphasises that the case study method has been criticised owing to a lack of rigour and reliability. This is owing to the fact that it does not address issues of over-generalisation in a specific scientific research setting. Despite this major limitation, the strength inherent in the case study approach is that it allows the researcher to gain a holistic view of a series of events, which provide an overall picture from a wide range of sources of evidence. As mentioned earlier in the chapter, the best way to understand how communication affects the quality of facility management projects was to adopt a holistic view of how this department operates their projects. One of the factors that should be highlighted is that the facility projects are pure maintenance projects, therefore, understanding how they operate the projects is essential.

3.4.2 Targeted population: sampling

3.4.2.1 Population

The facility management team at the life assurance company consists of five facility managers and four help desk staff, while there are 100 groups of contractors, suppliers and consultants on the procurement list of the facility management projects, and of these groups, 39 mail surveys were completed and returned to the researcher. All the FM team members were interviewed by means of a focus group meeting. Even though there are 8000 tenants in the life assurance company, only a few individual heads are involved in the FM projects, and these individuals are referred to as area controllers, while in this research they represent tenants. The tenant survey questionnaire and help desk call log information was used to understand tenants' concerns and queries during projects. A total of 3172 tenants completed the tenant survey that was sent by CPM (Corporate Property Management) (refer to Appendix A) and this number represents 39% of the tenants.

3.4.2.2 Case study

The case study used in this study endorsed the researcher to use purposive sampling, where members of the FM team were identified to provide relevant information that allowed the researcher to answer the research question. These selected members were approached to complete the survey, and during this process a snowball sampling technique was used to identify stakeholders who are not included in the database, but who are involved in the projects. These stakeholders were later approached to participate in the focus group. One of the advantages of purposive sampling is that it worked well if there are limited resources to generate huge sampling, and also to access small groups easily. It is also important to mention that the snow balling technique was used to reach participants who may be useful for the research, especially because the researcher was not   aware of them. These were the contractors, consulting engineers and suppliers who have done FM projects. As indicated by Welman (Welman *et al*. 2010:57) and his peers, a disadvantage with non-probability sampling is that it does not enable the research to estimate the sample error, but in the case of this study, the method is convenient for the research, as the study is inherently qualitative in nature (See Appendix B: Profile of Respondents).

3.5   Ethical considerations

At the beginning of the study a letter of consent from a life insurance company was requested to conduct the research. The letter of consent also indicated that the research will not use any information, which is detrimental to the company (See Appendix F). An email was sent to different contractors, suppliers and consulting engineers to request permission to allow their employees to participate in the study. In the case of focus groups, the invite was done via email and participants are made aware of what the research is about and how their participation would be used in the study. All questionnaires were accompanied by a letter indicating the intention of the study and the go-ahead from CPUT's Business Faculty to conduct the study (see Appendix D and E).

3.6   Strengths and limitations of methods used

Because one of the objectives of the study was to ascertain the views of FM project stakeholder groups towards FM projects, the methods that were chosen were useful in

accomplishing this goal. Qualitative methods allowed the researcher to collect a lot of data from a small sample. As Furze, De Lacy and Birckhead (1996) argue, the truth is more likely to be revealed by an in-depth interview because the respondents tend to express themselves without being forced to do so. In the focus group situation, participants get an opportunity to share ideas and knowledge about the topic in question, and thus help each other to find a solution. Qualitative research techniques usually produce data or information, which expose motives and assist the interpretation to be made. Financially, it is cost effective because the researcher did not have to deal with a large sample to collect data.

Despite this strength, it is important to note that all facility managers at the life assurance company had completed the mail survey as the first stage of the research. But the difficult part of this work emerged regarding the aspect of choosing a specific number of participants that will represent other stakeholders, mainly contractors and suppliers. The actual number of these stakeholders cannot be predicted and as a result it is highly likely to exclude important members in the group. For example, the primary data that was used was the annual FM survey, which was completed by tenants at the life assurance company. The annual survey is sent to all tenants to complete voluntarily; it is not legally binding. The number of tenants who complete the survey was recorded. The limitation with the numbers is that it might not represent the views of all eight thousand tenants.

Another factor is that most of the FM projects are technical managers, tenants or recipients and might only see the finished product, therefore, their views might come from the angle of the finished project or during project, which might be too technical to understand. For example, tenants were told that the lift upgrade would take six months, but owing to the national strike, the exported goods arrived one month later, and the communication that was sent to tenants was to apologise for the delay of the project. In the mind of the tenants, they saw that the communication was bad because a proper date should have been communicated earlier, not knowing that FM cannot send communication to everyone informing them of the reason for the delay.

During the focus group the facilitator conducted the meeting, but there may be participants who will take over the session owing to their experience and higher roles, which will suppress the views of others. Some of these types of participants in focus groups will draw back and withhold their valuable information. The method of using an email questionnaire faces the

risk of not receiving the questionnaire back even though the motive of the study will be explained.

3.7   Reliability and validity of the study

3.7.1   Reliability

Welma *et al*. (2005:9) argue that both qualitative and quantitative research aims for reliable and valid results, however, quantitative research focuses more on reliability that is a consistent and stable measurement of data, but qualitative research focuses more on validity, because the objective of the study must be representative of what the researcher is investigating. Golasfshani (2003:601) concurs that the term reliability is a concept, which is used for testing or evaluating quantities research, but the idea is used in most research. While Stenbacka in Golasfshani (2003) argues that the purpose of evaluating the quality of studies in quantative and qualitative research is one reason that the concept of reliability is misleading in qualitative research, hence their argument is that if reliability is questioned in a qualitative study, then the study is no good. Dorsten and Hotckiss (2005) refer to reliability as consistency. They claim that a measure is reliable to the extent that it yields the same answer each time that it is used in the absence of change in whatever is being measured. For the purpose of this study, we will concur with Stenbacka (2001) who argues that reliability concerns measurement, therefore, it has no relevance in qualitative research, but if the study is done again in the same environment without change, then the same answer would be observed, and then we can conclude that the study is reliable. In agreement with the statement, John and Long (2000:31) suggest that although efforts may be made to enhance a study's reliability, in most cases the nature of the data and the sample make this practically hopeless. For the purpose of this study, the triangulation method was used to collect data, the researcher sent out questionnaires, conducted focus group interviews observed and also observed. All of this was done to ensure the reliability of the study.

3.7.2 Validity

To ensure validity for the data collected of this research, the criteria specified by Beverland and Lindgreen (**2010:57**) were adopted, as shown in Table 3.1 below.

Design test	Theoretical explanation of the concept of how we achieved validity on the impact of stakeholder communication on facility management projects	Operationalised through
Construct validity	Ensuring that the correct operational measures have been established for the concepts that are being studied.	- Triangulation through multiple sources of data or interviews that were used for this research. - Readers were provided with a chain of evidence by using cross-case tables or quotes from informants. - Interviewees were allowed to review the draft and to provide feedback.
External validity	Proving that this research case study's findings can be generalised.	Population of interest has been specified for the research.

Table 3.1 Positivist quality criteria for case researchers (Beverland and Lindgreen, 2010:57)

The researcher worked with the CPUT statistician to evaluate the validity of the questionnaire that was used for the study. Data collected by the researcher was also assessed by the statistician before analysing it. The researcher also requested some of her peers who conduct research at the HRSC to assess the questionnaires.

3.8 Data Analysis

Since the data that was collected in this research was qualitative, data analysis was conducted by means of qualitative analysis. Data analysis is the process through which the researcher continually reflects on collected data, moving deeper to understanding and representing the data, and deriving an interpretation of the larger meaning of the data (Creswell, 2003:190). Thus, the data was sorted and classified according to themes that emerged from the responses of participants (Neuman, 2006:468), and the themes that were used to highlight common issues emerging from the interviews (Flick, 2007:63). The focus will not only be on common issues, but will also highlight differences in the experiences and meanings expressed by the participants. The purpose of reflecting on the differences is "not to be selective, but that data should be reported in full" (Mouton, 1996:177).

SPSS (Statistic Product and Service Solution) application was used to analyse data captured through questionnaires that were completed by participants. The software produced graphs which were analysed through the qualitative method in Chapter Four. All the data that was collected was represented on graphs, tables and numeric figures (relevant to the study), and these datasets were interpreted qualitatively.

3.9 Summary

As discussed in the chapter, the qualitative method was used to collect data in order to answer the research question. This chapter attempted to show how this project was undertaken from the early stages right to the stage where the researcher had to collect and analyse collected data. While the main aim of the chapter was to describe the method that was used, it is critical to mention that attempts have been made to show how the research topic or question has influenced the preferred data collection methods. The chapter also discussed, at great length, how the sample methods were selected and for what purpose. Due to the nature of the research question or study, the purposive and snowball sampling techniques were considered by the researcher as a suitable method for the study. While questionnaires were used to collect data from a range of FM stakeholders, the focus group interviews were useful to develop an in-depth understanding of the effects of communication on FM projects. The observation method also gave the researcher an understating of how and why FM project are conveyed at the life assurance company.

Chapter 4: Results Presentation

4.1 Introduction

The previous chapter, Chapter Three, paid attention to the discussion regarding data collection methods that were adopted in the study; motivation for the selection of these methods; and their strengths and limitations. This chapter is divided into two sections, the first part looks at the facilities management corporate unit: structure and project, while the second part discusses the analysis of FMU project communication channels, stakeholders and project quality. The primary aim of this section is to present the results as a basis for analysis in order to answer the research question, as stated in the introductory chapter, Chapter One.,

4.2 Facilities Management Corporate Unit: structure and projects

In light of the research questions specified in Chapter 1, this chapter aims to present the results in a descriptive manner, to answer the first questions. Before moving to the analytical discussion, which is related to the impact of stakeholder communication in terms of the quality of projects at the Life Assurance Company, the chapter hence provides an overall understanding of the nature, significance, and function(s) of facility management at the Corporate Property Management (CPM). Therefore, the central aim of this chapter is to provide an overarching picture of the facilities management process and projects in order to understand the purpose of the (FMU) at the life assurance company; how it is structured; the type of services that they render; and to whom the services are rendered. Given the focus of the study, which is stakeholder communication and project quality, this chapter argues that in order to understand the impact of communication on project quality, it is crucial to first and foremost know who are the stakeholders in a particular project. Thus, it is from this aspect of analysis that the chapter will first identify stakeholders, their projects and day-to-day communication channels that they use to improve the delivery of the project's desired outcomes. The critical aspect of the discussion also casts some light on the barriers. While communication barriers are discussed here, it is, however, important to mention that the question about whether or not stakeholder communication at the life assurance company affects the quality of FM projects is addressed at great length in this chapter.

4.3   Corporate property management and facilities management

On a global scale there is an increasing proliferation of many companies to expand their business focus into property acquisition and management in order to survive in the global competitive economic environment. It is within this context that the Facilities Management Unit (FMU) of the life assurance company, which was studied in this research, was formed in the last fourteen years under the auspices of Corporate Property Management (CPM), which is a structure where FMU is located in the organisation. This means that the FMU at the life assurance company (LAC) did not emerge in a vacuum. As one of the respondents explained: "Facilities management cannot be isolated from the daily property management of the LAC as it is through this that there was a need for FMU" (per comm., Jamiel Amien, 20 April 2013). According to Mrs Zenobia Kearns, the FM unit is an integral part of the property division, which provides property management services to the life assurance company and its clients within and outside of the group. The notion behind the institutional arrangement of this nature was that the property division would become less reliant on the life assurance company for business while growing the revenue or profits for the life assurance company. At a pragmatic level, the creation of the property division's objective was to grow the company at an average of twenty six percent in the first three years of its formation. During this period a number of properties were disposed of, following the low return on the life assurance business. However, as Devenish (2003:35) indicates, the only way to achieve the expected growth was through acquisition and/or creation of new business by providing property related services to the other landlords, both locally and abroad. The decision to move into the property industry was mainly driven by the desire to offer clients outside the life insurer stable wide level services with superior skills that have been developed over time, while providing a broader client base.

When the property division was formed, the company created and bought into a number of companies, which offered services in advertising and the sales company that markets advertising space within and on the building. The life assurance property division offered the following services:

- Total property management of retail, office and industrial properties;
- Property asset management;
- Valuation services;
- Facilities management services;

- Sales and investment; and
- Property development.

While the facilities management unit is listed as a separate entity amongst the six services listed above, it is critical to mention that its function(s) cut-across all these service units. Prior to the establishment of Properties FM, the property division had a Technical Department that fell within the property management division. Initially, the property division used outsourcing for the FM functions of the Life Assurance portfolio to service providers, with the Properties Division managing the outsourced service providers and providing FM consulting services to other clients. During that time, the Facilities Department became the most successful business unit within the property division.

However, the company realised that outsourcing of the FM portfolio is no longer cost effective and as a result the decision was made to terminate outsourcing. This organisational change is well supported by Devenish (2003:23) when he states that in 2003, the life assurance company's property division ceased to offer FM consulting services to the industry. It was during this period that the property division became a major role player within the facilities management industry. According to one of the respondents, the property division did not renew all the outsourced FM contracts that they had with external service providers at the end of 2003. Therefore, for at least 10 years since then, the company has witnessed an escalating role of the FM division coupled with the proliferation of projects and resources that were acquired to fulfil FM functions. By then the FM division had employed more or less 60 staff members whose main task is to manage FM projects to ensure that FM division functions effectively (Devenish 2003: 23).

With regards to the marketing strategy, the study revealed that the property division has never exhausted its efforts in marketing to look for work opportunities. Instead, the division used word-of-mouth as a marketing strategy to disseminate information about their function(s). The division entered the mainstream industry to keep abreast of the market. To achieve this, they needed to increase the market share to introduce itself to the market. The property division at the life assurance company grew and it became one of the market leaders in terms of FM. It is critical to mention that the implementation of performance-based contracts with service level agreements and life cycle costing for the replacement of equipment within

buildings, also improved tremendously (Devenish, 2003: 2-3). What has been noted over the last 10 years is the growing role or function of FM units, accompanied by the compelling task to manage FM projects with a wide range of stakeholders. The major question is who the FMU stakeholders are. What role do they play during the FMU project process? Before answering these questions, it is crucial to provide an overview of the FMU of the life insurance company and also to show how this unit manages its projects. To achieve this, the projects must be located within the context of the FM processes.

4.3.1   Facilities management unit and projects: Life Assurance Company

As discussed earlier in this chapter, the Corporate Property Management (CPM) is part of the FMU, and thus the FMU structure, including its functions, cut across the CPM functions. This means that the CPM could not function well without a strong and effective functioning of the FMU department. The CPM is also crucial in the sense that it is responsible for the oversight of two major buildings under the auspices of the life insurance company. The Life Assurance Company's senior management is well aware of this crucial function, as these two major buildings accommodate more than 8 000 people daily. The technical aspect of asset management, often executed by means of project management, is the sole responsibility of the FMU department of the organisation.

Therefore, the FMU exists to ensure effective management of built environment (and associated assets), which in this case is the properties that are owned by the life assurance company. The complexity and dynamics of built environment was once under the leadership of Linda Delport, former Head of Facilities at the company in Cape Town from 2006 to 2010. During this period she once attended a conference where Lesego Kenosi (the former Gauteng Regional Manager of the CPM in Gauteng) presented detailed information related to the FMU functions (including relevant projects), as well as their alignment with the broader vision of the organisation. This deliberation was crucial in a sense that attempts were made to specify, objectively, how the FMU functions should be measured by using the business model adopted by the company. As a result, an FMU model emerged and it is the model, which is used at the life assurance company to measure the key performance indicators for the FM team. Without ignoring the project aspects of the model, it is critical to mention that the key components of the model are: finance (which includes the costs); contract management; development

projects; and facilities management, which includes a wide range of maintenance oriented projects (see Figure 6 below).
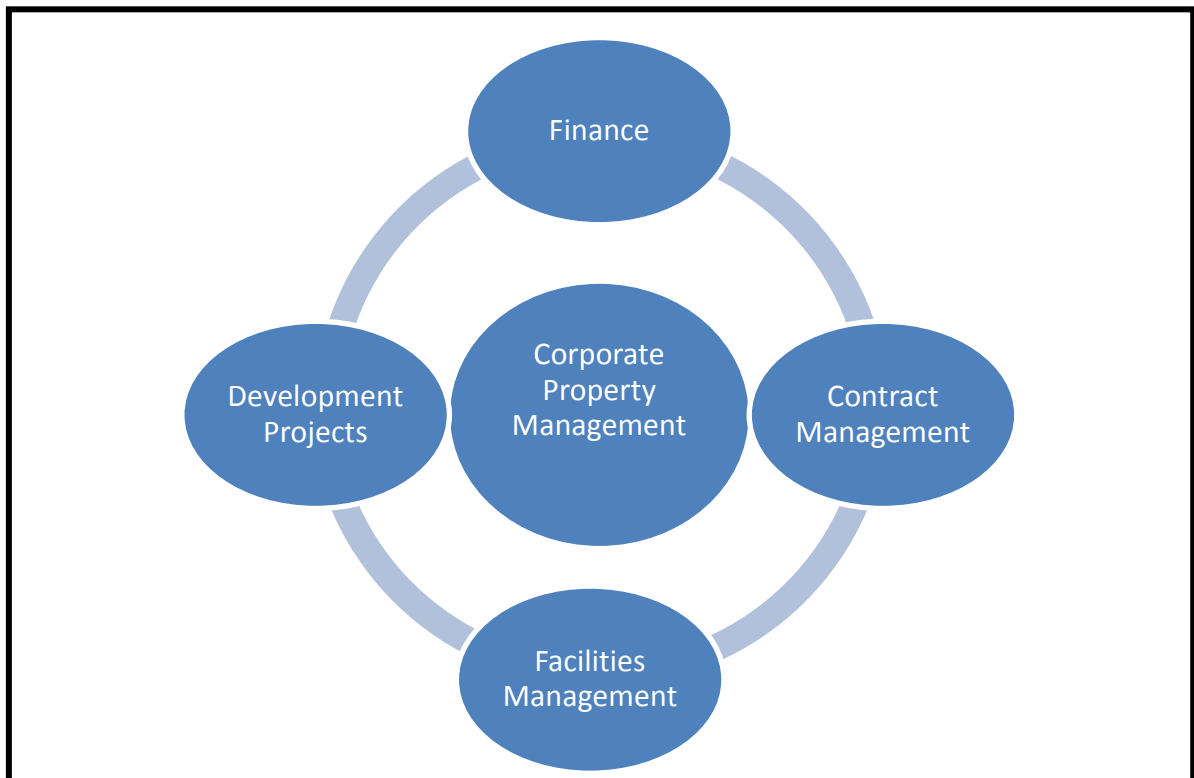
Figure 6: FMU model within the CPM structures and processes (Author: 2013)

Although the above model appears to portray FMU functions on a marginal scale, in reality, the FMU function is the key functional unit that ensures effective management of assets in the company. With respect to the above CPM-FMU model, projects to maintain the built environment within parameters of the relevant building regulations are performed by the FMU department. For instance, the facilities division is headed by the National Technical Manager whose main task is to oversee and ensure that the building complies with the South African National Standards SANS 10400 (building regulations). Therefore, all the work that is executed in the building must adhere to the Occupational Health and Safety Regulations (OHS) Act for the safety of the contractors who are appointed to work in the building, as well as tenants who occupy the building on a daily basis. Recently, the most important aspect pertaining to compliance with the building regulations is to keep abreast of the latest building standards, which include, among others, green building or building efficiency standards and energy efficiency. But under normal circumstances the FMU should ensure that the facilities' call centre or helpdesk attends to the needs of tenants in the building. One of the respondents who were interviewed during the focus group sessions stated that the FMU could not function

well without a proper structure with competent human capital to support the standards set by the company.

As indicated above, the Technical Manager holds a the key position in a well-functioning FMU process as facilities management requires individuals or supporting staff with a strong technical background or knowledge base. This does not mean that other aspects of facilities management are not crucial. In terms of the life assurance company, FMU, under the leadership of a Technical Manager, should ideally attend to at least five major functions and these are: Air-condition and Fire Detection, Plumbing and Suppression, Electrical and Lifts, and Hygiene and waste management recycling and Occupational Health and Safety (see Figure 7 below). One of the major functions of the FMU is the call centre, which is there to receive calls from tenants on a daily basis concerning enquiries or complaints related to any issues in the building. The received calls are dispatched to different contractors to execute work, and as one the respondents commented, it is one of the many ways that they communicate to improve projects' delivery.
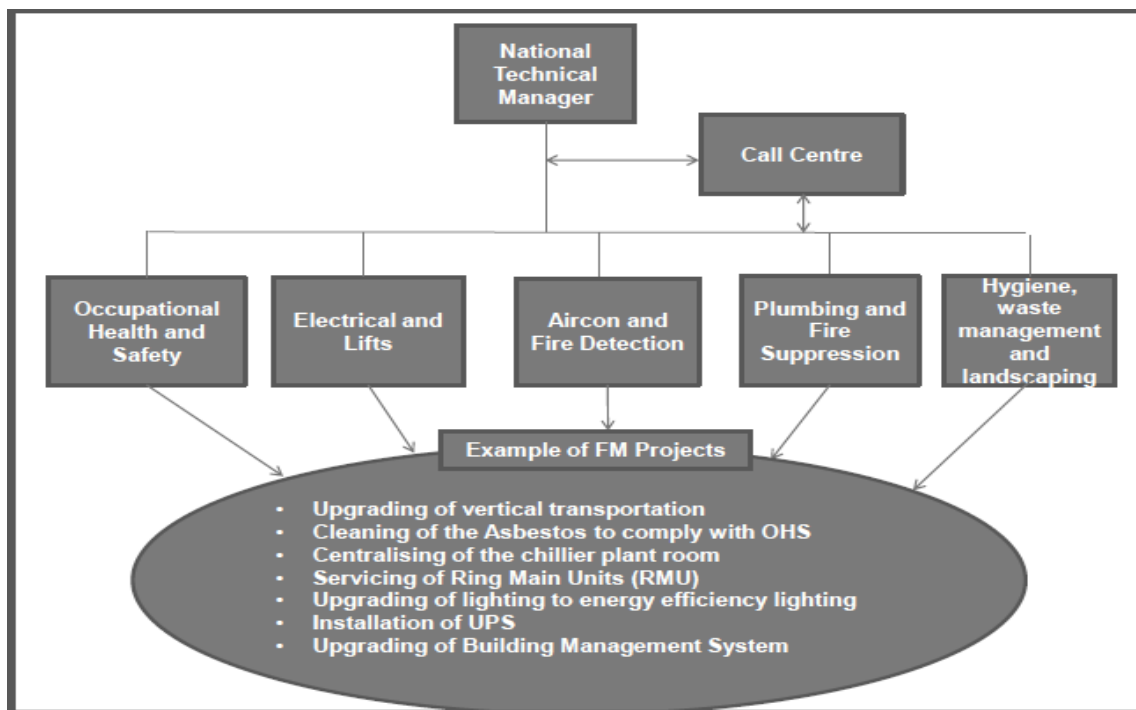
Figure 7: Corporate Property Management Facilities Management Structure (Author, 2013)

In essence, the key aspect of the day-to-day operations of the CPM, through FMU, revolves around the FM functions and FM projects as outlined in the above diagram. In a nutshell,

these major FM functions are also called FM projects, as it is through these projects that the ideals of the FM function are actualised. Within this context, a facilities manager's role is to execute projects to accomplish the strategy of property division to retain and increase the value of the property in order to obtain the returns for the shareholders. It is thus critical to mention that most of these projects, especially the ones that have been recently commissioned, sought to enhance the quality of the building. One of the major projects set to accomplish this is the energy efficiency projects, which entail:

- The installation of energy saving lights to ensure that energy consumption in the building is committed to save the environment and ultimately the cost of electricity;
- The installation of air-condition sensors and diffusers to ensure that air-conditioning does not work when they are not needed or when the ambient temperature inside and outside the building is normal;
- The installation of energy saving lifts and escalators to ensure that lifts and escalators do not consume a lot of electricity even when there is no one using them; and
- The building of the centralised air-condition plant to ensure that the consumption of energy related to the air-conditioning function in the building is controlled properly and monitored on a regular basis.

The national technical manager (Khiyam, 20 April 2013) who was interviewed for this research also stated that the successful implementation of the above project initiatives will most likely have financial gains for the life assurance company. For instance, the recent official energy consumption, including the cost, indicated that at least 75 percent of energy consumption in the building is from the air-conditioning function. Therefore, these projects are driven by the goal to obtain rebates from Eskom (the electrical utility company), and also to meet the requirements set by the Green Building Council (GBC) to achieve the green star.

It is crucial to mention that some of the FM projects are also driven by a mandate to replace equipment because they have reached the end of their life span (see Table 4.1 below). It was also reported (by the focus group respondents) that currently, a number of projects, in particular the ones listed in the table below, fall within the project category, which are currently being executed by the FMU of the life insurance company, which is situated at the Head Office in Cape Town. All of these projects were specifically commissioned for the

2012-2014 budgets. The project resources, which range from the initial phase to the final stage of these projects, are mainly funded by the landlord, which is the property division.

Project description	Budget (Rand)	Time frame
Replacement of eight escalators	R10 million	1 year
Upgrade of Air-condition control system with ne diffusers	R800 000.00	1 year
Establishment of a Centralised Air-condition system (CAS)	R55 million	2 years
Replacement of four lifts	R4.3 million	1 year
Installation of Grey Water System (GWS)	R500 000.00	6 months
Installation of Day Light Harvesting Sensor (DLHS) and lightning	R10 million	5 years, executed per area
Installation of aircon diffusers, aircon sensors and air handling	Not yet determined	5 years in phases
Relocating the diesel tanks	R500 000,00	1 year

Table 4.1 Facility Management Projects at the life assurance company

4.3.2 Facility Management Projects at the life assurance company

While the timeline for the operation of the above projects ends in 2014, it is important to mention that most of these projects are already at an implementation stage. Thus, the question was asked as to what could make these projects succeed. This question is critical, as the main purpose of the study is to establish whether or not stakeholder communication (in a specific FM projects) has any effect on the quality of the projects. In an attempt to answer this important question, the focus group respondents highlighted that for any FM projects to be executed successfully, it is crucial that the project team should work collectively. While this point was mentioned as one of the requirements, the respondents, however, placed more

emphasis on specific project resources and stakeholders as proxy to execute the FM project successfully. The resources or stakeholders that they have identified are:

- Tenants -: these people are important as they need to be informed of any work that is planned to be undertaken, when and where, especially if there are services that would be interrupted in the building. If it happens, in any case, the services will affect all tenants, as mail is relayed in advance to inform all tenants. But if the interruption is only on a certain section of the building, then area controllers are informed to notify affected tenants;

- Contractors-: these people are crucial as their main task is to repair, maintain and install new equipment in the building. Therefore, the FM projects cannot set off without their inputs. This includes contractors that provide services such as cleaning, security, landscaping, waste management, and so on;

- Specialist consultants: these project experts are required to provide guidance and advice on legal matters, especially on issues related to industrial relations, as well as any electrical, mechanical or structural design or repairs; and

- Suppliers or wholesalers that supply material and equipment to the contractors and consultants that are used by the FM service provider or supplier directly.

Although the above list of project's resources correlate with those presented by Devenish (2003: 47) in his thesis, the concept of project stakeholder is not featured prominently in this narrative. The major question that is yet to be answered relates to who exactly is regarded as stakeholders in an FM project. The above list of resources appears to provide an answer for this question, thereby dispelling the notion from Jepson and Eskerod (2008:335) that a stakeholder should always be someone who is directly involved in the project. For the purpose of the study, the project stakeholder can be defined as someone who is directly or indirectly affected by the project. Therefore, by adopting this definition, one may argue that the above information has somehow answered our question. This is because in the FM project context, there are quite a number of stakeholders who may directly or indirectly affect project outcomes, yet these stakeholders are not directly involved in the project. For instance, tenants and different contractors from various disciplines have varying degrees of influence in a project. It is within this context that these stakeholders are regarded as an integral part of FMU mentioned in Figure 4.1.3 above, a diagram, which shows the services that are offered

by the FMU. Furthermore, tenants, for example, are not part of projects, but are affected by projects and in turn also affect the project outcome.

4.3.3 Locating stakeholders in FMU projects

It is thus critical to provide an overview of FMU project stakeholders, including those who are affected by the projects, but who are not directly involved in the project. Ideally, this should be done by means of identifying various stakeholders who are involved in the FMU project at the life assurance company. The data collected in this research revealed that there are a number of stakeholders who are involved in FMU projects at different levels of the project decision-making process. For instance, the fund managers, as stakeholders in a particular project, usually make high-level decisions to determine whether or not a specific project fund is released to commence project implementation. However, the tenants, as one of the FMU project stakeholders, do not hold high-level decision-making powers, yet they are constantly affected by the daily operations of the projects. According to the Facilities Management Team (Raymondoux bowker), the FMU projects operate within a complex and challenging environment as the team is tasked with maintaining a 160 000 m^2 building. While the building is subdivided into eight sub-buildings, it is crucial to mention that their spatial arrangement, the date in which each was built and the equipment used, provide an indication of the type of maintenance projects that are required to retain the value of the building. In the case of the life assurance company, the technical manager argues that "these buildings were named on the year which they were built. For example building M54 was built in 1954 while building M81, M89, M91, were built in 1981, 1989 and 1991, respectively" (Jamiel Amien, per com, April 2013). However, the recent buildings were named based on their functionality and location. The OMCCII, for example, is (Old Mutual Computer Centre), the Mall is where all external tenants who have retail stores trade their items; the Business School Building is where the Life Assurance Company offers training to their staff; the Policy File Building is where all policy documents are filed; and the West Campus was named by its location.

Therefore, owing to the nature and the age of the buildings, it is clear that a large proportion of FMU projects predominantly focus on maintaining the buildings. According to the FMU team, they estimated that at least 75 percent of project funds are dedicated to maintaining the buildings. The Senior Management Team of the life assurance company is well aware of the sensitive nature of these projects, as they serve to maintain the quality of the building to satisfy their clients. From the names of the buildings, mostly those named after the years, it

clearly indicates the age of the building. It is important to note that some of the equipment in the building is as old as the building names. Some of the buildings' equipment was also modified, but the modification is also old and does not meet the safety standards and compliance of the current bylaws. Therefore, what makes the FMU department of the life assurance company work is a range of maintenance projects to ensure that Old Mutual properties are well maintained on a regular basis.

4.3.4   FMU projects and their origins

4.3.4.1 Case study: lift upgrade project

As stated above, this chapter has managed to provide information about stakeholders who are involved in FMU projects at the life assurance company, which is located in Cape Town. While this information is illuminating, it is important to articulate how and what establishes FMU projects. Therefore, the primary aim of this section is to present a range of FMU projects, how they emerged, and who are the associated stakeholders.

Prior to the establishment of FMU projects, invariably during the initiation stage the FM team appoints engineers in different fields to carry out the life cycle analysis. The purpose of the analysis is to establish the maintenance cycle and the age analysis of equipment to determine whether the equipment is due for an upgrade or for a replacement. During this stage the FMU project team should produce an analysis report (similar to the feasibility report of any project) to the asset manager. The main task of the asset managers at this stage is to review the analysis reports to determine whether or not funds should be allocated for upgrades or a major maintenance project, which is classified as Capex. This process normally applies to the following projects: lift and escalator upgrades; maintenance of Ring Main Units; Upgrade of distribution boards; energy efficiency (lighting, air-condition; and the centralised air-condition plant room).

In the case of lifts, Mr Amien argues that in 2009 the FM team appointed the Lift Inspectors Engineering Company to carry out the life cycle analysis on all vertical transportation at the life assurance company in the Western Cape. The scope that was given to the lift engineers was to determine the age of the vertical transportation throughout the life insurance company building, to carry out maintenance analysis by investigating the call centre log book (to see how often the lift stops owing to equipment failure), and to determine whether all vertical

transportation units comply with lift regulations, general machinery regulations, electrical wiring standards, lift regulation standards, fire regulations and many more regulations that affect the vertical transport equipment. The exercise took three months and the audit findings were submitted to the fund manager for budgeting purposes. The report indicated that a number of lift units are due for an upgrade. The report consisted of the lift upgrade budget, which indicated how much an upgrade project would cost. According to Khiyam Fredericks, a national technical manager, that after six months the fund management team approved the vertical transportation budget, as proposed by the report. The key aspect of the report also indicated how much Capex of the budget was available to commence the lift upgrade project. The fund manager gave the FMU project team approval to implement the lift upgrade project by using the money that was allocated to undertake the project under the auspices of the FMU.

With regard to the stakeholder involvement in these projects, the lift audit report described above addressed the question of which lift was due for an upgrade. Furthermore, the report also had to be submitted to various stakeholders for reviewed and approval. Prior to submission of the project report to the stakeholders, the technical manager stated that the call centre and the FM helpdesk played a pivotal role in allowing stakeholders to participate in these projects. Thus, the information that was collated through this process is later incorporated into the final audit report. In the case of the lift-upgrade projects, the FM team agreed with the report because the analysis was compared to the number of calls that are received by the FM helpdesk. The helpdesk received and communicated information about problems that were encountered by tenants with the lift. The FM team met with the Tenants Review Board (TRB) to give them feedback on which lift would be upgraded, why, and the process that would be followed to accomplish the project's objectives. Part of the tenant meeting was agreement on the method of communication that would be used to inform the tenant about the upgrade. The content of the communication was also discussed, and since all critical communication would be done with the tenant representative board, the tenant would only receive the start date and finish date for the project. Mark Albern, CPM representative, chaired the meetings and provided feedback to the FM team.

The major question to ask is whether the call centre and the helpdesk were the only means of communicating with stakeholders in these projects. Prior to implementation of the project, the technical manager said that a project meeting was scheduled and held between three

companies, namely lift inspectors, the life assurance's FM and an appointed lift contractor. In this meeting Raymandoux Bowker argued that these three parties jointly agreed that monthly project meetings will be held to allow each stakeholder to give the feedback, and to submit progress invoices for the jobs that were completed. The project's progress was communicated to the Tenant Review Board. The project communication to the tenants was handled by the marketing division, which used the mail medium to tenants and sent weekly updates to all eight thousand tenants at the life assurance company.

One of the stakeholders that was involved in the lift project is the life assurance security. Their major function was to arrange security access for the project team members. The security personnel often had working documents, indicating the location of the job, names of individuals executing the project, name of the site supervisor, working hours and noise factors. The CPM design team was also on the list of stakeholders that were involved in the lift project. The CPM team was appointed during the initial stage of the project to design the interior of the lift, according to the specifications, which were required by the life assurance company. This includes the lift floors, walls and lighting.

According to Yusuf, the lift inspector at FMU, the quality of the lift, as outlined in the Occupational Safety Act, is also important. While these aspects may appear to be somehow neglected, the FMU projects instituted recently have included the Department of Labour (as a stakeholder) to address this specific issue. As part of the scope of work, the lift inspector must ensure the safety of the lift contractors during the project as well as the, lift maintenance contractor and the users once the project is completed. The Department of Labour requires the list unit to be registered for Annexure 1. Each lift in South Africa has a unique name or address, which is issued by the Department of Health. During the project the FM, along with the appointed team of contractors, should comply with the safety standards and work with the Department of Labour.

The Department of Labour also requires that during fire conditions the lift must 'home' or go to the ground floor and stop with doors opened for the safety of users. This should always happen, unless the lift is a fireman's lift, when more safety requirements should apply to the lift before it can be handed over to the users. A fire signal is installed in the lift to connect it to the building panel so that during any fire the lift can respond and 'home'. In the case where the installed lift is a fireman lift, the fire marshal must approve the lift by inspecting it to

determine if it meets the requirements of a fireman's lift. This leads us to also identify the fire marshal as one of the key stakeholders that can influence the success of FMU projects. The fire marshal is from the Department of Public Safety. As far as house rules are concerned within the company, the life assurance company's tenant board requires every lift to have an intercom so that tenants can communicate with security or the help desk during occupied stoppage. An intercom installation company was also appointed to install intercoms during the project; therefore, an intercom specialist is also identified as one of the stakeholders in the lift project.

The above business case helps us to identify different FMU stakeholders in a lift upgrade project. It is within this context that the section was able to answer the first question of the research, namely to identify who the stakeholders are in FMU projects.

4.3.4.2 Case study: Ring main unit maintenance project

Another project that the FMU department operates to maintain the building at the life assurance company in Cape Town is the Ring Main Unit Maintenance Project (RMU-maintenance project). Unlike the Lift Upgrade Project, the RMUMP's critical function is to execute preventative maintenance. This is maintenance that is scheduled periodically to service essential equipment in the building. Essential equipment refers to equipment that affects the running of the business, especially if they are not functioning as specified by the manufacturer. Thus, this section presents an overview of the RMU project at the life assurance company and also shows how different stakeholders are affected by servicing the RMU at the life assurance company.

It is important to explain what the RMU is and its function. The Ring Main Unit (RMU) is the unit that is used to distribute power, and it has circuit breakers and is connected to the transformers. Heinrich, a senior technician, said that the RMU should be serviced at least after two years, but at the life assurance company the units were not serviced in eight years, because the IT division did not want to switch off the building. The units were at a point of failure, and would cause a major risk to the business, should they fail. To reduce the RMU failure, the electrical FM appointed a service provider that specialises in servicing and manufacturing of RMU units to service it.

The RMU project came about whereby the service provider (Schneider Electric) submitted quotations with the scope of work indicating, which building will be affected during the service. After the service provider submitted the scope of work to the FMU, a meeting was scheduled with IT stakeholders to further discuss the scope of the project. According to Raymondoux (2013, per com), the aim of the meeting with the IT Change Control Management (IT CCM) team was to present the scope of work, which indicates how the building would be affected during RMU service. It is fascinating to learn that at the initial stage of the project, the FMU consulted with relevant stakeholders as a means to enhance the success of the project. It is, however, yet to be discovered whether or not the involvement of these stakeholders would improve the project quality. In the context of the RMU project, the IT CCM team comprises of all internal IT CCM stakeholders at the life assurance company, and external IT companies that operate business for the life assurance company, but their service is remote. The other stakeholder group that was outside IT CCM, but yet affected by the servicing of RMU, is online traders. This stakeholder serves to trade shares day and night. The Event Management Department is also included in the list of key stakeholders that are affected by the project. This department was affected as its main task is to host events for external service providers. Hence, the Event Department was notified and ultimately approved the request to service the RMUs.

However, whenever the project is planned to kick off, one the major tasks to be executed prior to execution of the project is to ensure that all major electricity supplies are switched off. Thus, it is for this reason that the RMU project team consults the City of Cape Town's Electricity Department (as a stakeholder) to assist with switching off the electricity supply to the site for safety measures. Therefore, the switching off of electricity supply was part of the OHS statutory requirement. It is important to mention that during this phase, the UPS contractor was also one of the key stakeholders whose main task was to switch off the Uninterrupted Power Supply to make the IT load safe. Thus, it is clear that without the involvement of these stakeholders, the project could hardly accomplish its desired outcome.

Due to the nature of the service, the Lift Service Providers (LSPs) also fell within RMUs servicing project. Like the City of Cape Town's Electricity Department, the LSP task was to switch off the lift. The Electrical Plant Room had the power factor correction bank and for safety it had to be switched off, which added a list of stakeholders to the RMU projects. Due

to the nature of the RMU servicing project, the project team also made a special request to the tenants to switch off their desk tops, and to evacuate the building before all services were switched off. The tenants who were notified were those who have line-function departments that work after hours. The FMU team met with the business leaders who made a commitment to communicate with tenants through an email that was sent by the Marketing Department to all life assurance company tenants.

Due to the complex nature of the FMU project, it is indeed clear that the operations of these projects are inherently challenging and complex. Therefore, as depicted earlier in this chapter, the success of these projects relies on proper communication and engagement with all relevant stakeholders from the initiation phase of the project. The data that was collected through interviews and survey questionnaires also revealed that during the operation of the project, weekly project meetings were regularly held to discern how each function or task in a project is affected by various factors, while determining the flow of events. Other respondents also mentioned that a project of this nature can easily fail if the time schedule is missed and some key stakeholders are systematically neglected or not consulted. For instance, the tenant - stakeholder is not the custodian of the project. But if the project fails, then they are likely to be impacted upon and if they are not consulted, the project's ideals may be seriously compromised. Thus, the case studies that were used in this research demonstrate how various stakeholders might be involved in FMU service projects.

The project cases described above are but a few out of almost more than 10 projects that are conducted by the FMU Department at the life assurance company per year. The reason why these projects were selected for the study was to provide a brief description of how FMU projects are conducted at the life assurance company and the levels of stakeholder engagement. The study reveals that, in reality, tenant stakeholders only participate in the early stage of the project, and hence their inputs are not collated to further improve project quality. As a result, one or two aspects of the FMU project quality have significantly lacked an appeal to some stakeholders, particularly the tenants.

The following scenario is used to indicate how passive engagement of the FMU project stakeholders (tenants) has significantly influenced the project output in respect of the quality of the project. The case study insert reads as follows:

The FMU had to start a project to save energy so that the company can access Eskom energy saving rebates and also to prepare for the 2015 carbon tax emission. The other reason for the lighting upgrade was because the call log trend analysis indicated that seventy percent (70%) of daily calls logged at the FMU call centre was due to lighting matters.

After a detailed investigation, it was discovered that the lights at the life assurance building consume a lot of power, because they are old and always on. As one of the engineers said, the principle of saving energy is to switch off your equipment or appliances when not in use.

The old incandescent and fluorescent tubes were replaced with DSI (digital signal interface) lighting. The new lights used day light harvesting to reduce the lighting level when the sun reflects into the building, and the lights were connected to a motion sensor so that when there is no movement in the building, then the lights would automatically be off. The lighting also brought uniformity into the buildings because the old design made lighting shadows.

Tenants were only informed of the start date and the end date for the projects, and the motive of the project was also not clearly communicated to the tenants. After the completion of the project, the number of lighting calls or complaints doubled. The charts indicated that the building was consuming less power than initially but the tenants were not happy. Was the goal of the project achieved? Yes but tenants did not understand the model of the executed projects. They were used to working in the offices where the lighting was dark and always on. According to the tenants, this was a failed project, and even though the technical scope was satisfactory, they were not happy. Eskom was happy with the outcome of the project but the tenants were not.

The above insert demonstrates that the lower level of communication is not congruent to stakeholder interests, and if this persists it could lead to poor project quality. The negative effects on the quality of the project in this context is owing to the fact that the least preferred stakeholders tend to have a high interest in the project, which is invariably not incorporated by the technical stakeholder narrative during the project life cycle. In the case of the FMU projects, the sluggish communication during the installation and upgrade of the lighting project created huge problems upon project completion. This was owing to the fact that there was no communication with tenants regarding what exactly the project stood for. It appeared that tenants were viewed as least important stakeholders, and hence they were not exposed or involved interactively in the early stage of the project. In most cases project management practitioners only communicate with stakeholder clients merely to introduce the project. This is referred to as "communication by consultation" when there is limited scope for laymen stakeholders to provide inputs into the project. Currently, there is huge criticism of the technical narrative of project management, which operates at the peril of laymen stakeholders.

As previously mentioned, the FMU team comes from different backgrounds and disciplines and in each discipline, projects take place involving different stakeholders (Refer to Appendix A & B). The only way to keep stakeholders in projects is through communication.

4.4 Analysis of FMU Project Communication Channels, Stakeholders, and Project Quality

This section discusses and analyses results from data that was collected from the questionnaires, focus group interviews, and observation. The two questions that are addressed in this chapter are:

- What formal communication channels exist amongst stakeholders who are involved in the facility management project at the life assurance company in Cape Town, Western Cape?
- In what manner does stakeholder communication impact on the quality of projects at the life assurance company?

The argument that emerges in this chapter relates to the broader aim of the research study, and postulates that communication is important to enhance the quality of the project. As Prahanski and Benton (2004:41) argue, communication is the glue that holds together a channel of distribution from various project stakeholders to achieve the project's desired outcome. In a pragmatic sense the study reveals that organisations, in general, and the life assurance company (case study), in particular, do not regard communication as an important element of the project management process. This limitation is also reflected in the broader body of knowledge, which informs project management practices. For instance, among the nine elements of project management contained in the PMBOK, communication has received little attention. Therefore, it is no surprise that organisations do not often incorporate communication in the assessment of project quality. While this is the case, the study further reveals that FM projects cannot function without communication amongst stakeholders. As stated earlier, the aim here is to pre-suppose that communication is a problem. Therefore, this chapter focuses on the results that there is a strong correlation between communication and project quality.

Due to the above analytical introductory discussion, it is important that the chapter is structured in a particular manner, which is described below.

- Firstly, the section identifies formal communication channels that exist amongst stakeholders who are involved in FM projects. The crucial aspect of this analytical discussion is to show how each stakeholder group (in the list category of project stakeholders) participates or communicates within the project. This is achieved by drawing on project communication models provided by Adams and Hulme.

- Secondly, the section seeks to deduce (based on the empirical data) whether or not stakeholder communication actually affects the quality of FM projects. This aspect of the chapter also provides an analytical discussion to challenge the existing wisdom that, instead of communication, there are only three dimensions (quality, time and cost with scope being the fourth) to discern project success.

4.5   Communication channels in the FM project context

It is crucial to note that stakeholders in the organisation or projects create communication channels, which are necessary to exchange material resources (including human capital) for the success of the project. It is indeed clear that communication in a project is often initiated and sustained by stakeholders to deliver the project's desired outcome/s. Therefore, without proper communication, stakeholders may not be committed sufficiently to improve the quality of the project. Like any other projects, FM projects have different phases and within each phase there is a specific communication channel, which engages stakeholders in project decision making.

While it is necessary for all stakeholders to participate in the project (by means of a communication channel), it is crucial to cautiously mention that the level of stakeholder engagement in the project is often not equal. This was discovered during the field work, as some of the stakeholders argued that their participation in the project is uneven across the project cycle. According to Burke (2009: 41-42), project management is divided into four stages, namely definition, initiation and planning, execution and close out phase. Hence it was necessary to ask respondents at what project stage they were invited to participate in the project.

It is important to raise this question because those stakeholders who participate in the early stages of the project have the advantage of receiving a clear scope from major stakeholders. This is due to the fact that major stakeholders or stakeholders who have power in the project seem to attend project meetings during the initial phase of the project.

It is critical for all stakeholders to be represented at the definition phase so that all parties can communicate critical information that might affect the quality of the project.

4.5.1 Communication during different project phases
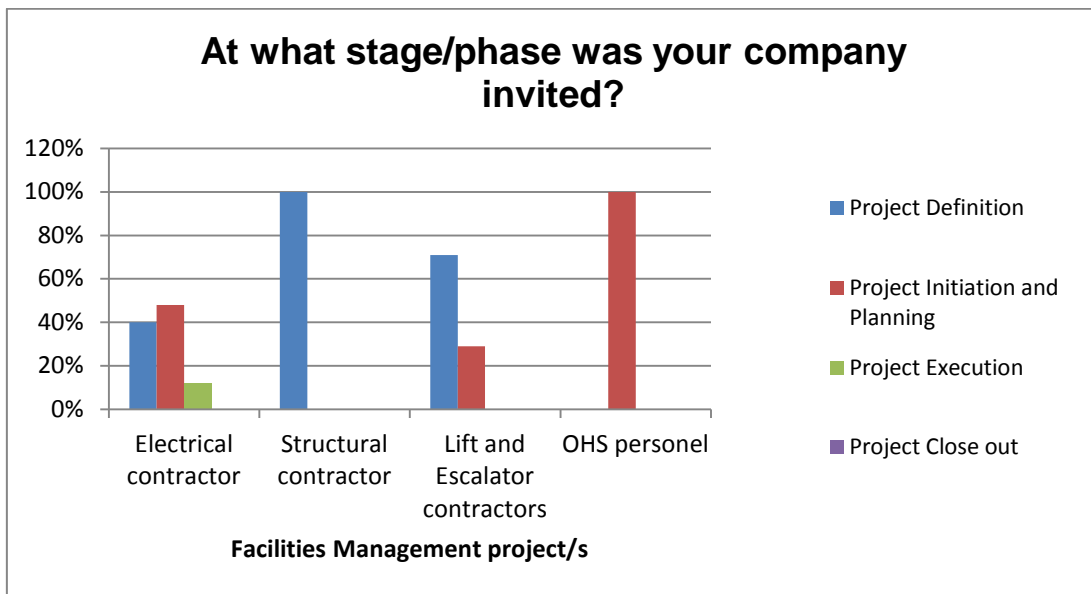
Figure 8: The stage(s) or phase(s) at which companies were invited to participate in the FMU project

As indicated in Table 8, the answer to the above question shows that 100 per cent of the structural engineer's stakeholder groups stated that they commence their participation in the project at the definition phase. The figure proves positive as structural engineers invariably participate in the project at the definition stage. In the context of FM projects, structural engineers are part of the larger group of project engineers who are involved in the technical aspects of the project. By virtue of their knowledge and expertise, they are, therefore, invited by the FM project coordinator during the early stages of the project to design the project scope and specification.

As one of the respondents stated, structural engineers' involvement in the early stages of the project is owing to the fact that they are usually appointed to assess and compile a report before commencement of the project. They also devise and design the technical specifications of the project to help to ascertain whether or not the projects are feasible. Electrical and mechanical engineers are normally part of the definition phase because they provide designs

and layout, while electrical, mechanical and lift contractors do the actual planning before execution. The OHS sees to it that projects are executed per safety standards; hence, they are involved in projects during the initiation and planning phases. Electrical and lift contractors are amongst the few stakeholders who are invited to participate in the project during the execution phase, and none of the stakeholders are invited to the project during the closing phase because this is when project handover takes place. While the project engineers who deal with the technical aspects of the project are set to participate in the early stages of the project, it is critical to note that the tenants participate prior to the definition phase during problem identification. Invariably, without tenants' problem identification (often expressed through complaints), there will be no projects that are undertaken (Figure 9).
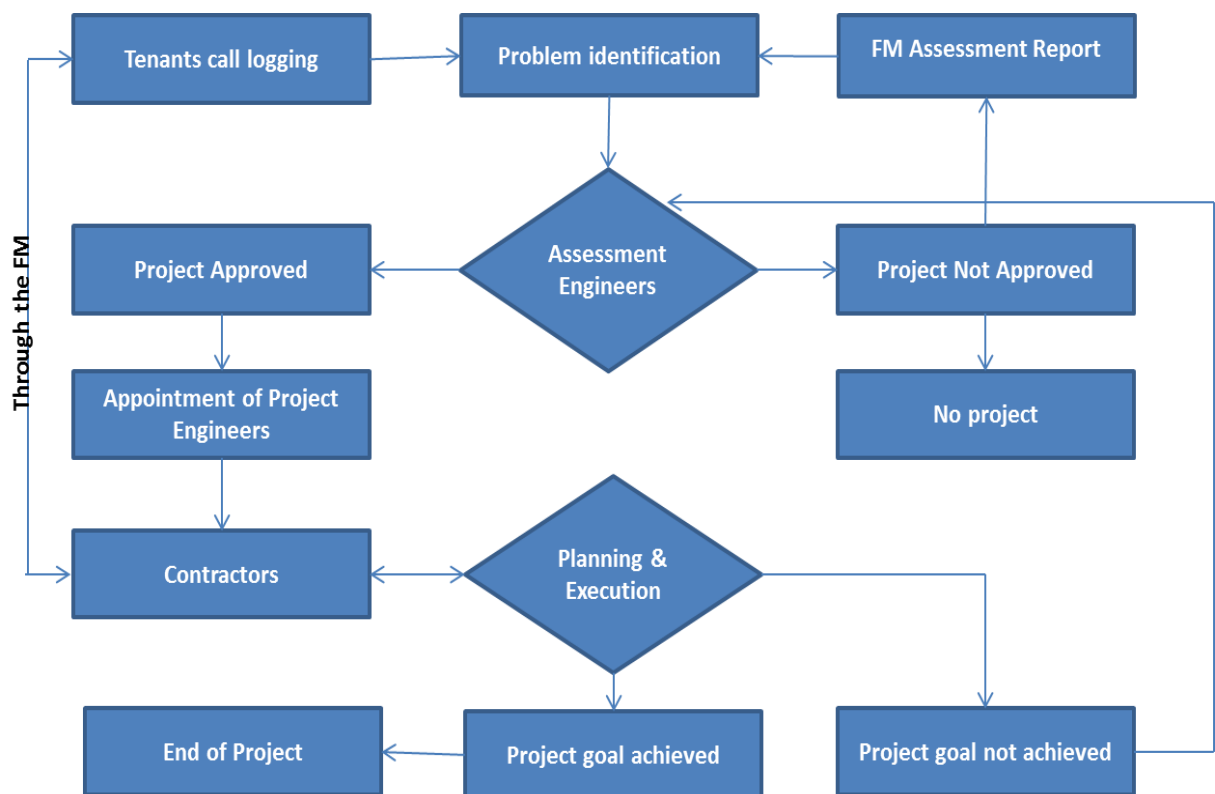
Figure 9: Involvement of project engineers and other stakeholders in the FM project (Source: 2013, Author's analysis based on observation)

As shown in the above diagram, the success of the project depends on the extent to which project planning and the execution process addresses the problem that was identified by tenants at the life assurance company. The major question is how do tenants communicate problem identification to the project engineers? According to Zenobia Kearns (FM Call centre/Help desk manager), the tenants communicate their concerns directly to the FM via the call centre. The FM call centre manager conducts a call analysis report every month to assess

the problems in order to determine whether the problem should be attended to by the technical team. If the nature of the problem warrants the technical team's attention, then the facilities manager further assesses the problem and holds the meeting with the tenants first, and then with the project engineers.

Once the project sets off, the pattern of communication between (client) tenants and the rest of the project team members continues whereby the project team members constantly update tenants about latest project developments via email. For instance, the tenants receive emails on a weekly basis. Should the tenants have any queries, which relate to the on-going project, they can express these via the helpdesk by means of telephone or the email medium of communication. According to Khiyam Fredericks (National Technical Manager), if a major problem is raised by a tenant concerning the project, then the FM manager schedules a meeting.

Given the above insight, which is related to interaction between the tenants and project stakeholders, it is clear that the channels of communication that are used to communicate project problems with tenants at the life assurance company consist of the following:

- Telephone-: logging calls with the FM call centre/ help desk communicating problem identification prior to project identification. This channel is also used during the project to log enquiries, which relate to the project.

- Email-: while this channel of communication is used by tenants to log a call during problem identification, it is also used by project team members to update tenants about the status of the project.

- Meeting-: if there is a major problem during the project that cannot be addressed via telephone or email, then a meeting is usually arranged to address the problem.

4.5.2 Communication channels with FMU external stakeholders

As mentioned in Chapter Four, FMU projects at the life assurance company comprise of a number of stakeholders who use various types of communication channels to advance their

interest in FMU projects. These stakeholders can be divided into two categories, namely internal and external stakeholders. The external stakeholders comprise of engineers and contractors who are appointed to perform technical tasks within the FMU projects. The question was asked regarding what channels external stakeholders use to communicate with FMU project stakeholders.

As shown in the graph below, the answer to the above question suggests that external stakeholders mainly use email and telephone (Figure 10).
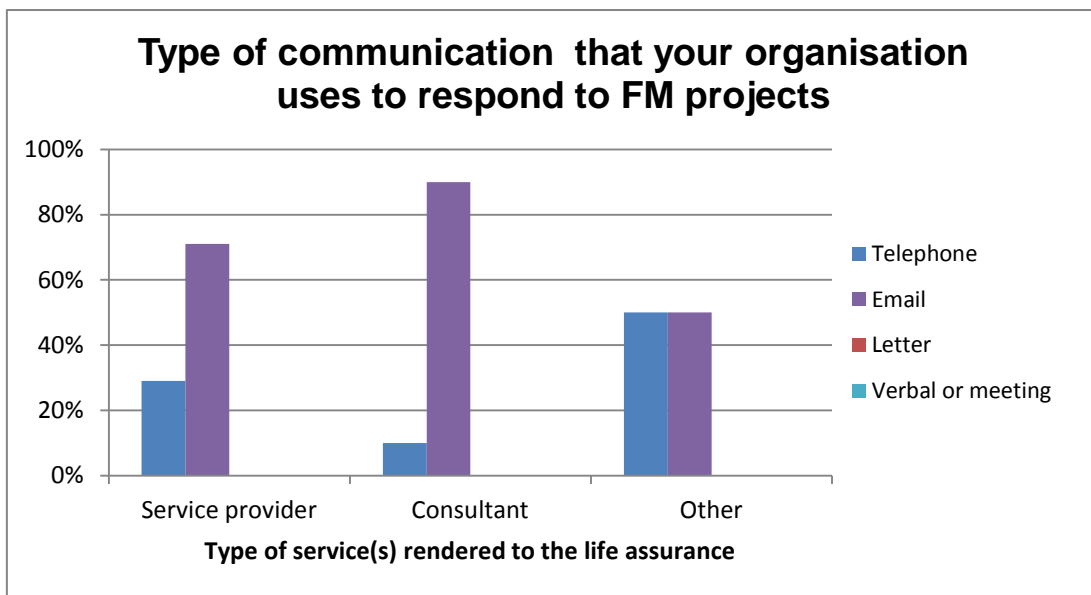
Figure 10: Type of communication organisation uses to respond to FM projects

Figure 10 above indicates that all FMU external stakeholders use email and the telephone as mediums of communication. According to the interviews, which were conducted with the external stakeholders, they often use email and the telephone as mediums of communication to set up meetings, and specifically to respond to project queries and verifications of technical designs. As shown in the above graph, 70 percent of the service provider contractors (who do the actual work in the FMU projects) use email, while 30 percent of them use the telephone as a medium of communication. However, 90 percent of the consultants (project engineers who are involved in design aspects of FMU projects) use email and 10 percent of them use the telephone as a medium of communication in FMU projects. The other category in the above graph comprises of financial administrators, Occupation Health, and Safety (HOP) personnel, internal contract managers and security. Of these, 50 percent stated that they use both email and the telephone, respectively.

It is indeed clear that even though both email and the telephone are used to respond to FM projects, email is used more frequently than the telephone. The reason why email is used more frequently is because information that is shared on email is automatically saved and can, therefore, be retrieved at any stage of the project.

Hence, as indicated in Figure 11, 100 percent of the consultants use email as a preferred medium of communication, while amongst the service providers' category and other stakeholders, email was recorded as the highest preferred medium of communication. Email is a preferred method of communication at the life assurance FM team. Stakeholders' needs can be communicated to all project stakeholders; the challenge is that during the project some stakeholders may claim that they did not receive an email that was sent. Depending on the responsibility of the stakeholder, this might impact the final product, affecting the quality of the project.
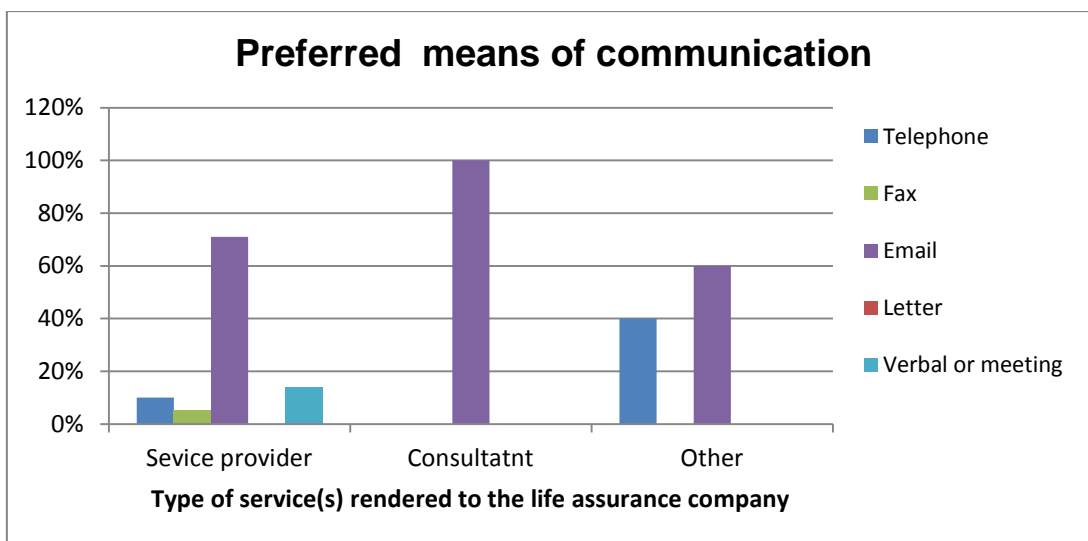
Figure 11: Preferred means of communication

While data that was collected in this research suggests that emails and the telephone were the most preferred methods, the figures above also depict that fax, meetings and letters are also part of the day-to-day means of communication within projects. As indicated in Figure 10, external stakeholder respondents prefer to use email communication because it can be automatically saved (if not deleted by the receiver), and may be retrieved at any stage of the project or used as a reference.

Hence it is important to mention that all communication channels, which are employed by external stakeholders, take place across all phases of the project life cycle, namely. from conception to handover phase. This is crucial, as most respondents stated that communication is important to build and sustain trust amongst stakeholders, in particular, between internal and external stakeholders. As one of the respondents stated during the focus group discussion:

> Communication is the core element of our FM projects, as without it we cannot function effectively to achieve project goals. For instance, the designs or layout plans that are formulated by project engineers with the project scope serve as communication tools, which convey crucial information about the content of the project.

The above insert indeed suggests that communication is vital, especially in the early stages of the project. Email is the preferred method of communication, but for crucial decision making a face-to-face meeting should be arranged. All stakeholders should have the same understanding about changes made in the project, which might affect the quality or the outcome of the project. The information should be relayed to project stakeholders so that during execution the final product meets the needs of the customer which in this case is the FM as a client of FM, representing the client being the tenant.

The FMU technical team stated that they use all modes of communication at their disposal to create awareness amongst their clients (tenants), as they are responding to their needs. Therefore, the initial stage of the project must be clear to all the stakeholders, and this is achieved by means of communication (see Figure 12 below).
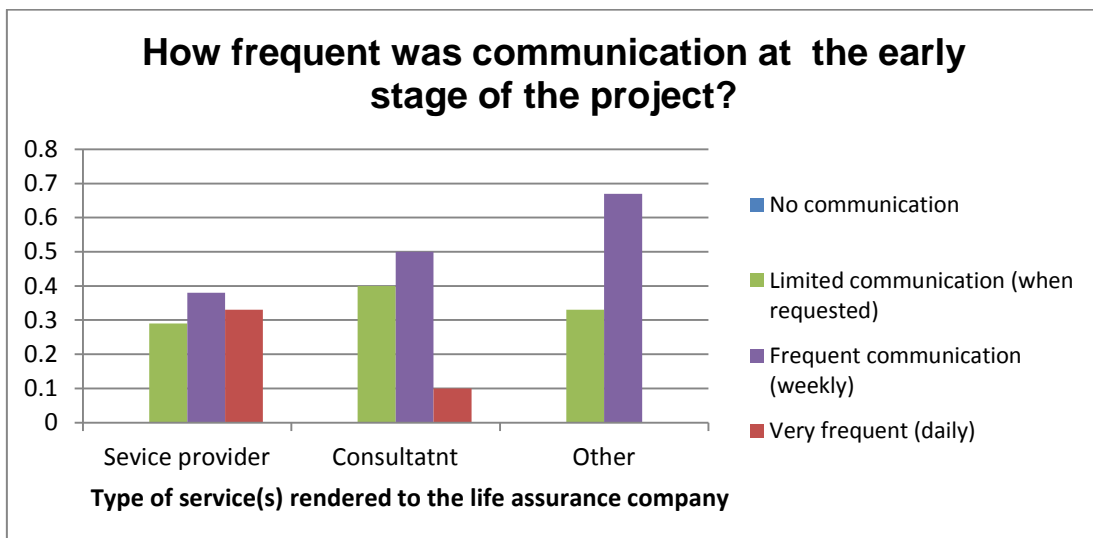
Figure 12: The frequency of communication at the early stage of the project.

FM stakeholders indicated that there is frequent communication between stakeholders at the early stages of FM projects. It is important to note that during the early stages of the project, communication is crucial because the scope should be clearly defined to all stakeholders. Even though no suppliers responded to the questionnaire, the service providers, consultants and other FM stakeholders showed that there is weekly communication during the initial stage of the project, while communication is also sent whenever there is a need.

The frequency of communication during the early stage of the project is crucial, because during this stage a project mandate is discussed, while project requirements and the final product, which is required, are set out, and dates for completion are agreed upon. Should there be any change then information should be shared so that dates and the budget can be amended. The project manager should set up weekly meetings where these matters are addressed. Should it happen that during this phase the project requirement is missed, then the quality of the project will be compromised.

Due to the need and value for communication of the project scope and objectives at an initial level, it was thus critical to further probe the respondents regarding the value of communication at this level. Does communication, if at all, have any positive effect on the project delivery at this stage of the project?
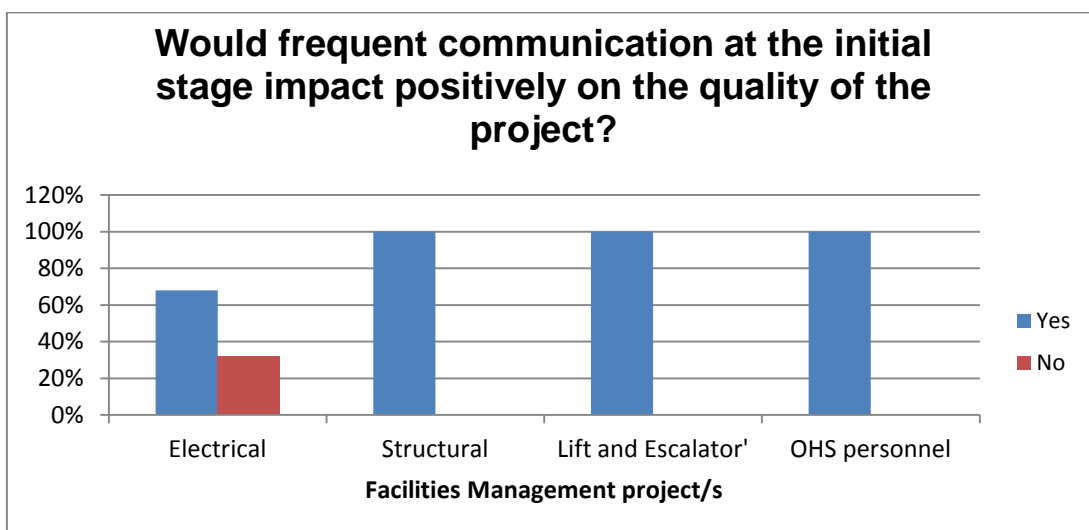
Figure 13: The impact of communication on the quality of the project at an initial stage

As depicted in the above graph, Figure 13, most respondents, especially electrical, structural and lift and escalator technical stakeholders expressed a positive inclination towards the

effects of communication at this level of the project cycle. They all stated that communication allows efficiency, and hence stimulate interests for stakeholders to participate in project decision making. This is clearly supported by the empirical data in Figure 14 above, whereby nearly all of the FMU stakeholders concur that communication is crucial at the initial stage of FM projects. They also stated that it certainly impacts positively on the quality of FM projects at the life assurance company in the Western Cape. At the initial stage of the project, an FMU project team member, through the help desk, circulates a message to alert tenants and other stakeholders about the incoming project, which may interrupt their service. As one of the mail communicates:

> Please find the attached change request for servicing of electrical equipment in M91 plant room. There will be no power (Generator / Emergency power, UPS power and normal power) in M91 building on Saturday night , all essential data in the telephone exchange in M91 and comms rooms and K Node should be saved because there will no power. Communication to affected tenants will be published on Mutual mail of the 18 March 2013 and 20 March 2013. This change will be presented to the change control team next week 20 March 2013.

The notion that was also expressed during the focus group was that: "when all stakeholders clearly understand their task and are able to communicate their concerns and problems encountered at the early phase of the project's, it is easy to adjust the project specifications to meet the needs of the stakeholders involved". Therefore, the quality of the project is not compromised, because all parties come up with solutions, collectively, for all concerns that are raised.

However, as Cleary (2011:3-4) argues, one of the basic elements for effective communication in any setting is the contextual organisational background. Drawing from his analysis, it is crucial to note that stakeholders in a project are invariably influenced or determined by the organisation, which is represented by the stakeholders. By virtue of the organisational culture and behaviour towards communication, some organisations do not devise a plan of communication, which stipulates their engagement with outside stakeholders, especially in a project setting. Cleary (2011:3-4) argues that these limitations are caused by the fact that some stakeholders assume that communication in a project will merely emerge automatically. Thus, it is for this reason that respondents were probed to explain whether or not each of them

devised a communication plan as a framework that guides them on how they can interact with other stakeholders in a project setting (see Figure 14).

4.5.3   Company project communication plan

Does your company have a communication plan for the projects?

Type of service(s) rendered to the life assurance company
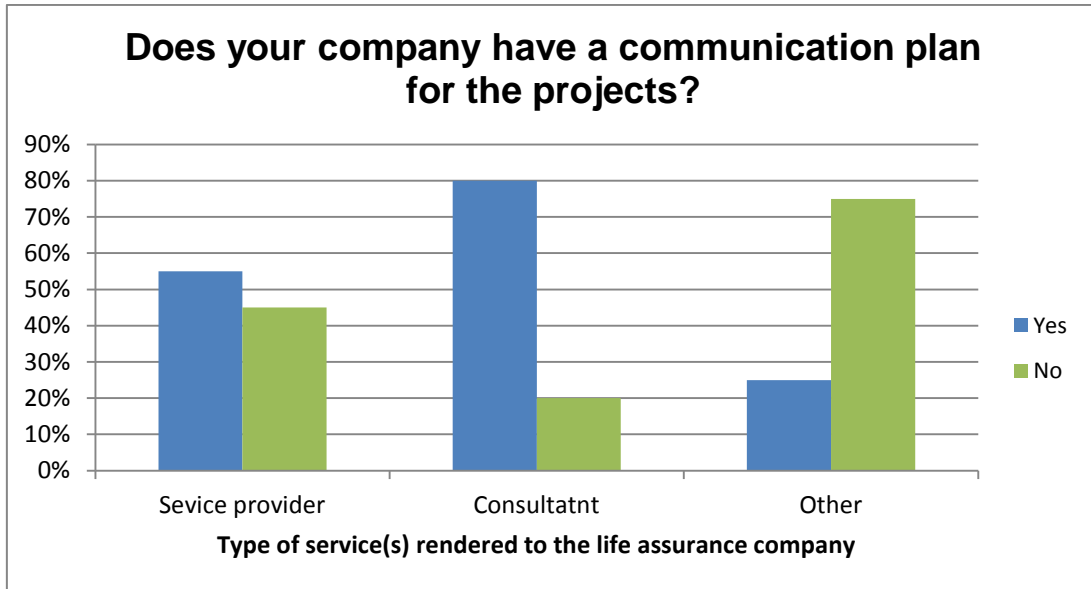
Figure 14: Companies communication plan for their projects

While data that is presented in the above graph indicates that service providers and consultants do have a communication plan that they use during projects, the other stakeholders do not project the same tune. For instance, 55% of the service providers do have a plan, which suggests that they do acknowledge the value of communication prior to the inception of the project. Amongst the consultants, all of them stated that they devise a communication plan for their respective projects. Other stakeholders (including tenants) appeared to have no communication plan that stipulates their engagement with other project stakeholders. Hence it was fascinating to learn that even though communication is cited as a crucial element in the project, some people or organisations do not devise communication plans for their projects. However, as shown in Figure 14, there are some individuals or organisations that understand that communication for a project is essential; hence they do have a communication plan for their projects.

In contrast to what is depicted in the above graph, the data that was collected from the focus group indicated that there is a communication plan for tenants who are based at the life assurance business. For instance, prior to the project's inception, information about the project

is circulated to all stakeholders, including the tenants at the life assurance company via email. The information that is communicated usually specifies the scope of the project and the project's commencement date, finish date, anticipated interruption and contact details of the FMU's project office, which is managed by the help desk. The focus group's respondents also stated that communication of this nature is often regarded as formal communication, which is treated seriously. As indicated in Figure 15, almost all stakeholders stated that any information that is communicated about the project is normally received via proper channels, and thus that information is crucial for all affected and interested project stakeholders.
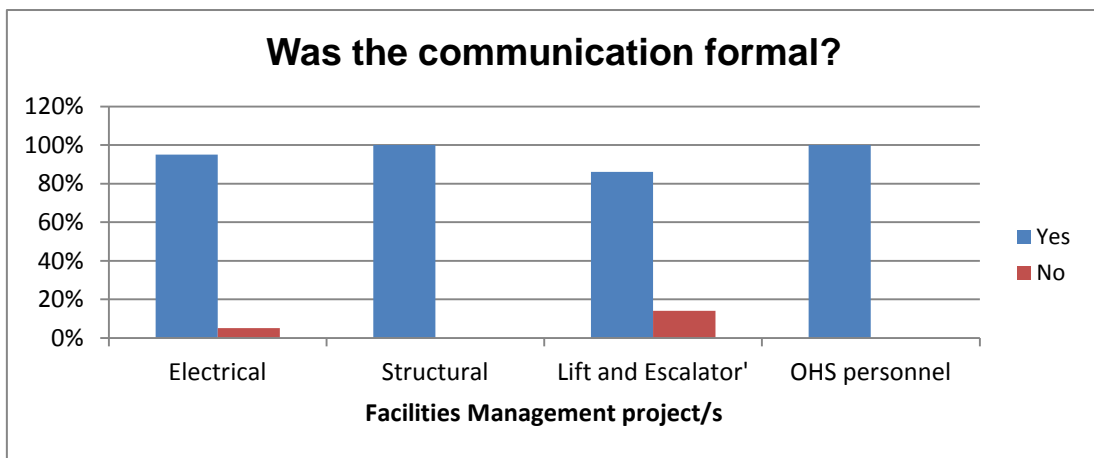
Figure 15: Formal Communication

As noted during the focus group session, formal communication is a product of a consented plan, which is deliberated by the project stakeholders to ensure that the project scope and delivery is understood by all stakeholders prior to the project's inception. Apparently, formal communication can be used for decision making with proper guidelines that direct the project process throughout the project life cycle.

While formal communication, driven by a proper communication plan, is cited as crucial for the success of the project, it is critical that stakeholder communication should also be supported by a dedicated project team. The role of the project team is to constantly update all project stakeholders regarding the progress of the project. This is done by means of providing feedback in order to ensure that everyone continues to understand the project's process. Other projects elsewhere show that they failed to sustain buy-in from stakeholders because they treat communication as an event, which is only used at the initial stage of the project to gain

project approval. Thus, the respondents at the life assurance company were asked to provide insight into whether or not they receive feedback during the project cycle.
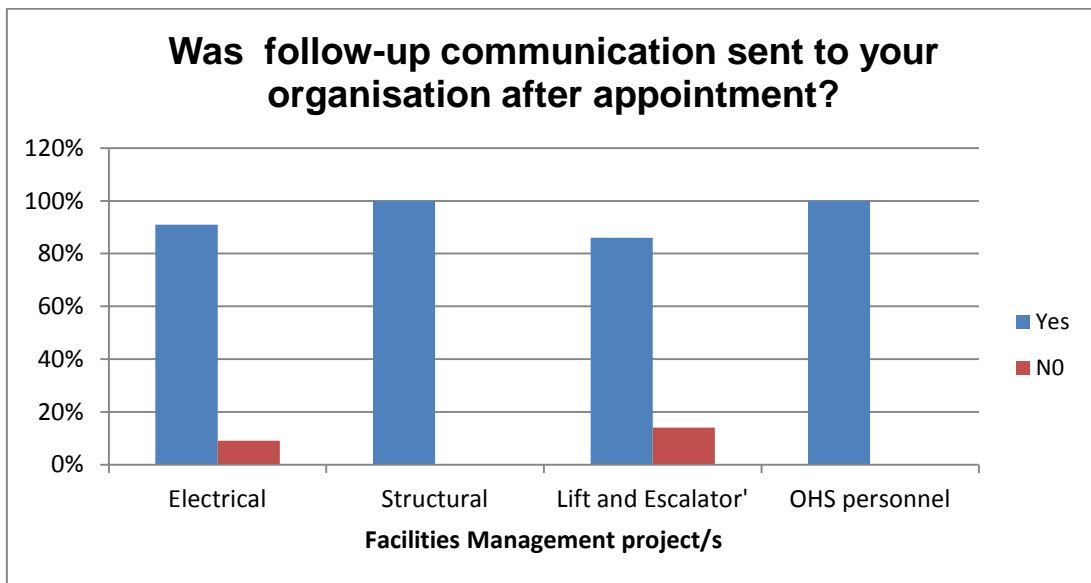
Figure 16: Communication follow-up with various stakeholders after project commencement

As indicated in Figure 16 above, during the life cycle of an FMU project, stakeholders receive feedback and updates concerning the project's progress from the life assurance company's FM project team. While this is welcoming, it is crucial to indicate that there were a few individuals who stated that their organisations do not receive follow-up communication from the life assurance company's FM team. This was also cited during the focus group interview, whereby some respondents stated that there are some toilet paper holders, which were installed without proper communication with the concerned stakeholders. As a result, these toilet paper holders do not look "professional", as some parts were incomplete. One of the respondents argued that this was owing to the fact that those remaining parts were beyond the scope of the project, which was communicated at the initial stage. Another respondent argued that it thus appeared that such issues could be addressed if there was constant follow-up communication with contractors and intended users.

4.6 Project decision-making

Therefore, the above scenario draws us to the most critical aspect of project management, namely project decision making. It is an undisputed fact that project stakeholder

communication is there to ensure that all stakeholders participate fairly in the project decision making process. It is a fact, at least at an international level, that stakeholders cannot participate effectively in decision-making without access to information that is timely and accurate. This information must be communicated to them so that they participate in project decision-making. It is, therefore, important to note that whoever makes decisions in a project is crucial in the analysis of communication and project quality. It is also critical to note that proper channels should be established to allow all stakeholders to influence decision making.

A number of studies suggest that when there is complete involvement of all stakeholders in project decision making, it is unlikely to not gain support. Increasingly it has been recognized that any project requires the active involvement of these people in order for it to be truly sustainable. Thus, communication, via participation from different stakeholders in the project's decision-making process (be it active involvement or passive involvement), introduces a range of ideas, experiences and expertise that motivate the development of alternative project solutions. This, in turn, enhances the knowledge of the actors who are involved in decision-making and implementation of the project. Moreover, if the involvement of stakeholders can lead to reaching consensus at an early stage in the project, the potential for serious conflict, which is detrimental to the project, decreases and the likelihood of lasting and improved solutions increases. It is for this reason that the question had to be asked to find out whether or not the pattern of project communication at the life assurance company does allow for the involvement of stakeholders in project decision-making.
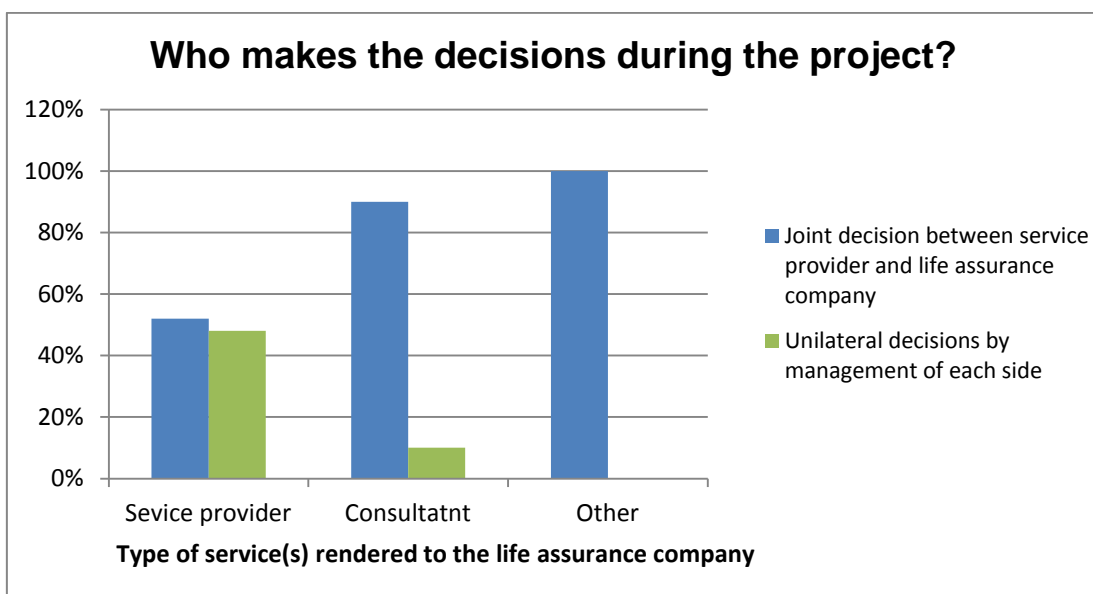
Figure 17: Decision-making during the project lifecycle

As indicated in Figure 17, 50 percent of the service providers and 90 percent of the consultants stated that decisions that are taken during the course of the project are jointly made between service providers and the life assurance company. The consultants and other stakeholders agreed, while 48 percent of the service providers and a few of the consultants expressed that decision making during FM projects are occasionally not made collectively. When asked about why there is a lack of stakeholder involvement in project decision making, they cited a number of reasons, which include:

- An invitation to stakeholders to the meeting to participate in project decision-making was issued or circulated shortly before the date or time of the project meeting;
- A lack of feedback from some stakeholders whenever they are invited to attend meetings where key aspects of the project are discussed and decided upon; and
- Sometimes other stakeholders do not have time to attend, as the schedules for those meetings clash with their work, activities.

Apart from communication throughout the project to update all stakeholders about the progress achieved since the project's inception, it is also highlighted that not all stakeholders participate in decision making during project execution. While this was cited as a critical element that can endanger the success of the project, it was also agreed upon by a number of respondents that decision-making during project execution is crucial for reasons, which are presented below.

- It can lead to informed decision-making as stakeholders often possess a wealth of information, which can benefit the execution of the project;

- Consensus reached at early stages of the project can reduce the likelihood of conflicts, which can harm the implementation and success of the project.

- Stakeholder involvement at execution level contributes to the transparency of public and private actions, as these actions are monitored by different stakeholders who are involved, especially during the project's implementation phase.

- The involvement of stakeholders can build trust between the clients and civil society, which can possibly lead to long-term collaborative relationships.

Based on the above, it was necessary to probe whether or not decisions concerning change during project execution are actually communicated to project stakeholders (see Figure 18 below).

4.6.1 Decisions concerning on changes during project execution
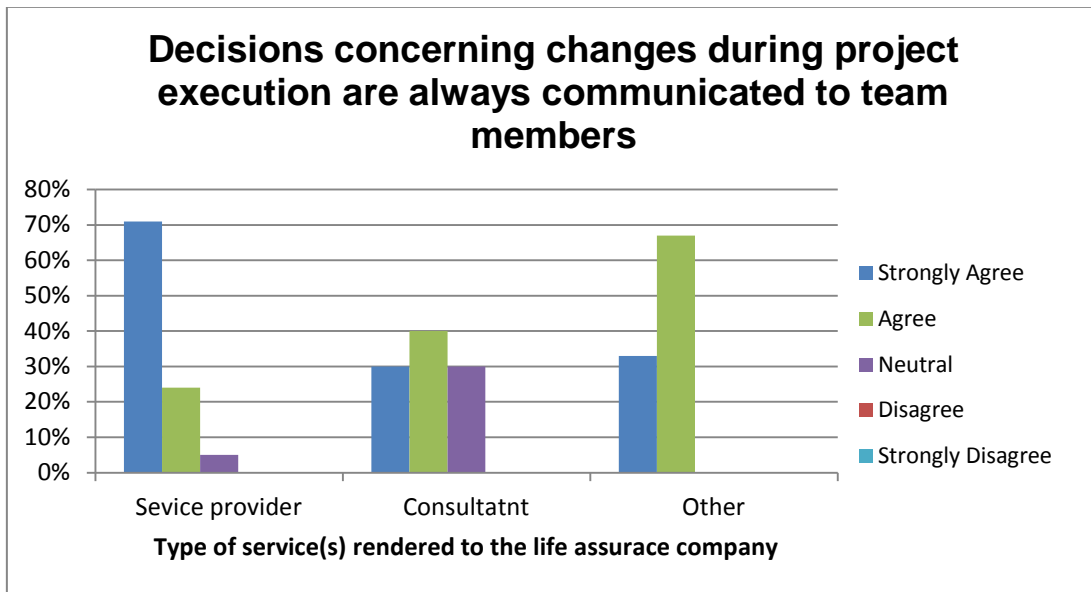
Figure 18: Decisions concerning changes during project execution are always communicated to team members

The collected data, which answers this specific question, as indicated above in Figure 18, suggests that at least 70 percent of the service providers strongly agreed that communication during execution is communicated well to the team members. Of this percentage, 22 percent of the service providers agreed, while 3 percent of them remained neutral. Conversely, consultants appeared to be lower with 30 percent who strongly agreed, 30 percent who agreed and 30 percent who remained neutral, respectively. Given the above data that is depicted in the above graph, it is clear that in some cases communication is not often relayed to all project team members during execution. This is shown in the above graph since consultants and others agreed, but once again, there were also a few consultants who remained neutral with respect to their involvement in decisions that are made during project execution. A result of this nature indeed indicates that most of the members do receive information, which is communicated to them, but not everyone in the team receives it. When asked about a reason for the lack of communication at this level, they cited a number a reasons. One of the main

reasons is that some stakeholders do not identify individuals who will be responsible for receiving and disseminating information concerning the project. Depending on the nature of the project, it is critical to note that some stakeholders are more visible in the project at the early stage than at the final stage of the project cycle. For instance, designers are more critically involved or more visible in the early stage of the project, while contractors and consultants feature more prominently in the execution stage.

4.7   Communication and functional roles: execution phase

Due to the above analysis, it was thus crucial to find out whether or not each stakeholder has a contact person who is appointed to handle communication functions during the project lifecycle. As indicated in Chapter Two, communication in a project does not happen in a vacuum. Cleary (2011:4) argues that communication is context-based and is often driven by people who come from different cultural and social backgrounds. It is for this reason that the project stakeholder group must identify a capable individual (s) to handle the complex nature of the project. This complexity must already be communicated to the project stakeholders so that they understand the role that they are expected to play in a project across the lifecycle (from the initial to the final stage of the project). Therefore, the key indicator of an effective communication process in a project can be discerned by the ability of project stakeholders or organisation to identify a contact person who will handle communication issues in the project. As shown in the Figure 19 below, service providers, consultants and others stated that they appoint individuals to receive and disseminate information that is communicated to them about the project.
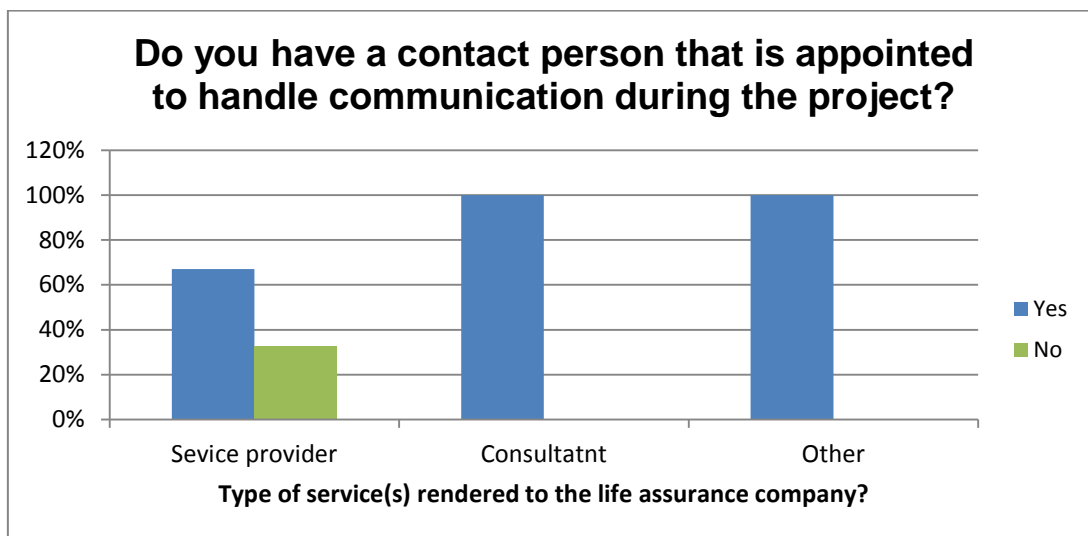
Figure 19: Appointed contact person to handle communication during the project

As indicated in Figure 19, 65 percent of the service providers stated that they do have someone who is dedicated to handle the communication function during the project cycle. However, 30 percent of the service providers stated that they do not have someone who is responsible for communication in the project. This means that anyone, at any stage of the project lifecycle, can receive information, which is communicated to the project team. On the other side of the analysis, the graph also shows that 100 percent of the consultants and other stakeholders do have someone who is assigned to handle communication functions that relate to the project.

What is important to note is that the data that is presented in the above graph shows that during the project there is a contact person who is assigned to receive and disseminate information, which is communicated to the project team members during the life cycle of their respective FMU projects. Regarding those who do not have someone, it was also discovered that they often use other modes of communication to receive and circulate information that is communicated to them concerning the project. This information is clearly projected in Figure 20 below. It is thus critical to note that this information shows how communication is handled at the matured stage of the project.
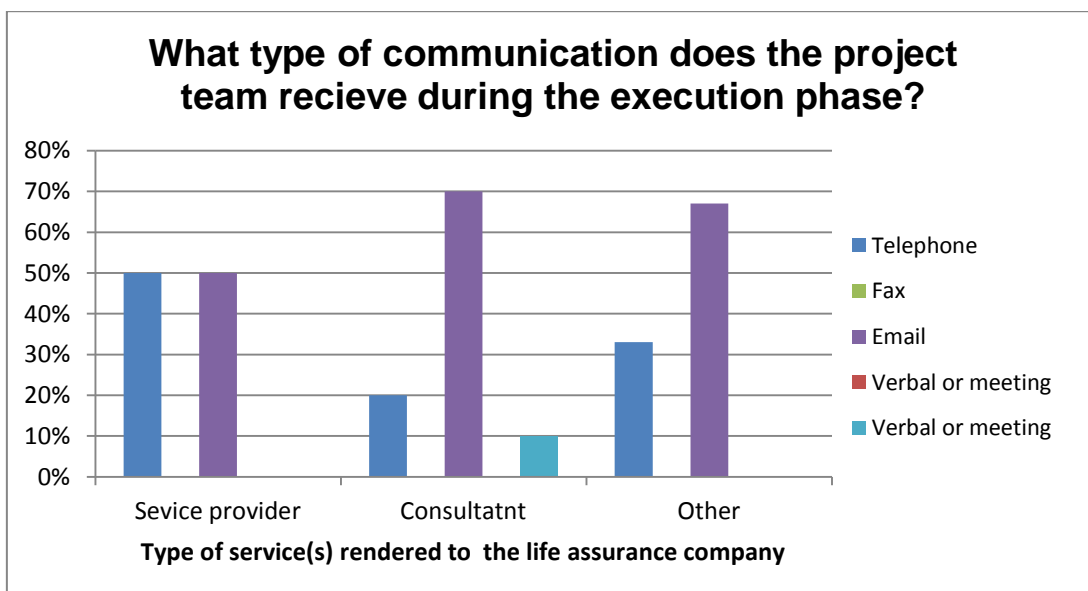
Figure 20: Type of communication received by each project team during execution phase

Each phase of the project is unique; hence, it is important to determine if there is indeed communication in each phase. The execution phase is also indispensable. Once a project

moves into the execution phase, the project team and the necessary resources to carry out the project should be established and ready to perform project activities. All these activities could not be carried out without proper communication with all of the affected and interested stakeholders. Ideally, at this stage of the project, the project plan should have been completed and baselined by this time as well. The project team and specifically the FMU project team's focus now shifts from planning the project to participating in, observing, and analyzing the work that is done. The results concerning what modes of communication were used at this level of the FMU projects (execution phase) indicated that three types are used, namely email, telephone and verbal communication. The method that seemed to be used more frequently is email, followed by telephone, while verbal communication in the form of meetings was used on a minimal scale by consultants (see Figure 20 above and Figure 21 below).

What method of communication do you use during handover?
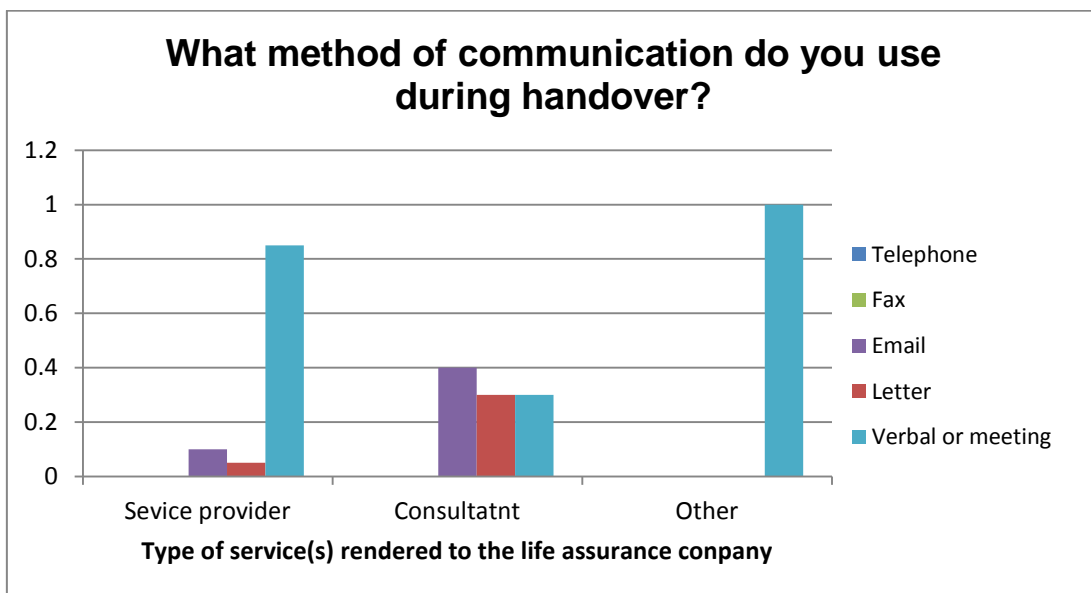
Figure 21: Method of communication during handover

During the handover phase of the FMU project the common method of communication that is used is verbal meetings. This is because particular attention during project execution should be paid to keeping interested parties up to date with project status, whilst dealing with procurement and contract administration issues, helping to manage quality control, and monitoring project risk (FMU Project Member, Per Comm, 2013). While the processes to control many of these elements are discussed within the project initial phase, it is still important that the FMU project team is cognizant of the issues as the project is being performed. Daily interaction and feedback (through communication) from team members

are vital for project success. As indicated in Figure 21, meeting is the prominent mode of communication, which is utilised by all stakeholders during this phase. While service providers also used email and letters, the graph shows that verbal communication or meetings are frequently used as methods of communication. According to one of the respondents during the focus group discussions, service providers normally do the actual work on the ground; hence their handover method is mostly via meetings. This is because they have to walk about, sign off the drawings, submit operating manuals, test the equipment and check the snag list. All of these project activities require constant communication (via meetings) with the relevant project stakeholders. While it is convenient for the service providers to hold meetings during the execution phase, the data that was collected also suggests that consultants do not the same because of the nature of their involvement in the project during this stage of the project. For instance, instead of using meetings, they use email as a mode of communication to distribute their signed-off-design on the system, and occasionally hold meetings and write letters. The above graph also shows that other stakeholders attend meetings or use verbal communication during the handover phase.

In light of the above background, it becomes clear that communication within the project is vital for the success of the project's execution. Thus it is critical to note that communication is used in different modes across all project phases. One of the critical line functions within the FMU project process, especially with respect to communication, is the interaction between vendors and the FMU project team. For the project to operate successfully, it is important that there is effective communication between the FMU team of the life assurance company and the vendors. The vendors comprised of a range of service providers (including engineers) who should ensure that all project material resources are available within a specified time to execute the project. Therefore, communication with these types of stakeholders should be established from conception to the final phase of the project. When the FMU project team was probed about how they communicate with vendors, they stated that they use a range of communication channels to establish and maintain contact with vendors. As indicated in Figure 22, the FMU project team uses the telephone, email, letters and verbal communication or meetings to communicate with vendors about the project.
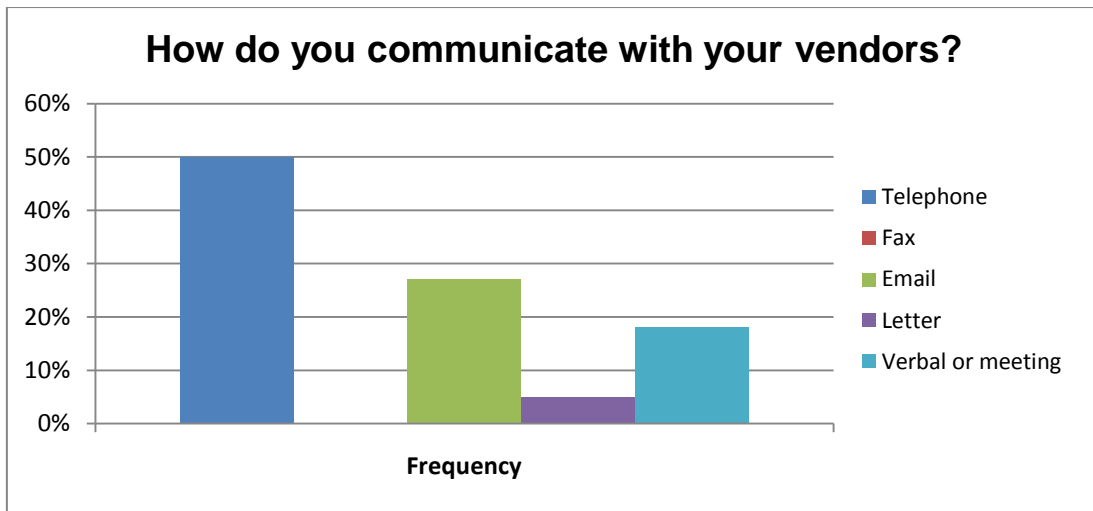
Figure 22: Communication with vendors

It is important to note that the question was especially addressed to the FMU team. The responses from them thus indicated that 50 percent of the FMU team frequently used the telephone, while 26 percent used email. Of these it was also established that at least 18 percent of the FMU team used verbal communication or meetings, and only 6 percent of them said that they used letters to communicate anything related to the project. It is interesting to discover, however, that whenever they received feedback, email, telephone and meetings are often used to communicate information about the project. As indicated in the Figure 23, almost 41% of the FMU project team received feedback by means of the telephone. This form of feedback is said to be less detailed compared to other information, which can hardly be communicated by using the telephone. However, 31 percent of the FMU project team stated that they received feedback by means of holding a meeting or by using verbal communication as a mode of communication in cases where they have to address an urgent issue that may affect the project outcome. As one of the respondents stated, this form of communication may occur if there is any change in a project, or if there is something that is required, which was not specified or predicted in the project scope. While the telephone and meetings are frequently used by vendors to provide feedback, 28% of the FMU project team stated that they still use email to receive feedback from the vendors (see Figure 23 below).
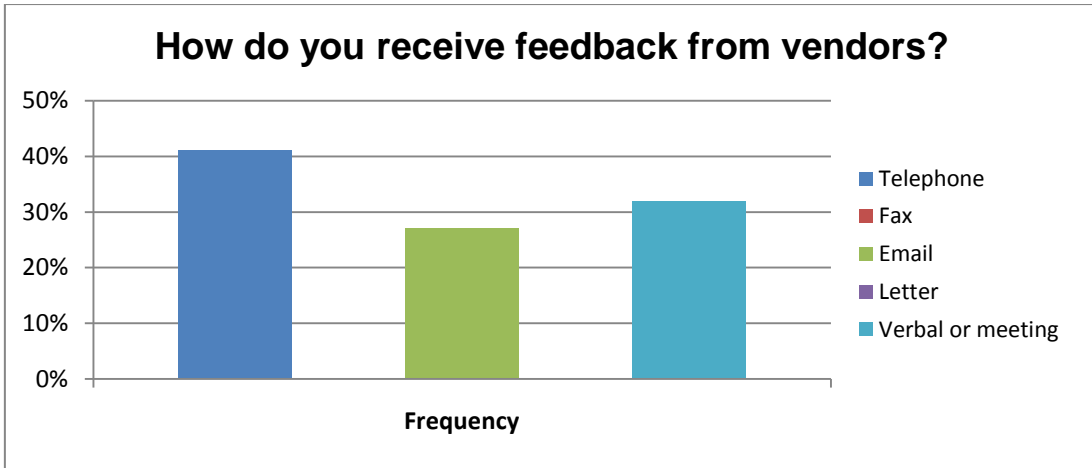
Figure 23: Communication feedback from vendors

Due to the huge response rate with respect to communication between the FMU project team and vendors, it was also important to establish whether or not there exist any communication barriers that could potentially affect the project outcome. As indicated in Figure 24 below, 88 percent of the FMU project team stated that they had experienced no communication barriers with the vendors, while 12 percent of them said that they had.
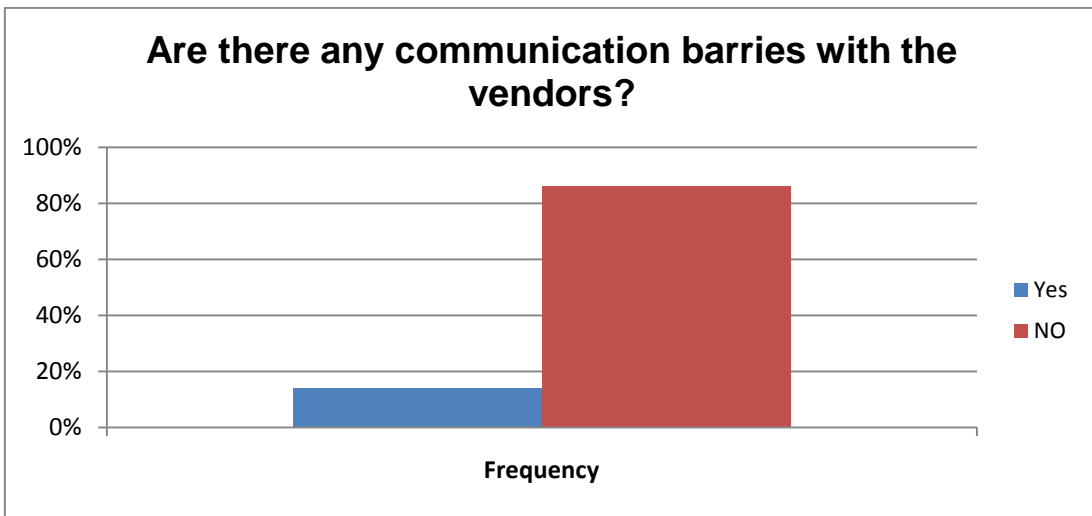
Figure 24: Communication barriers with vendors

It is important to note that the above figures correspond with the responses that were provided by the service providers. As shown in the section above, Figure 5.15 also confirms that the mediums of communication that are used to obtain feedback from vendors include the telephone, meetings and email. However, the method that appears to be frequently used to obtain project feedback is the telephone.

There is an increasing awareness that project management does not end at the final or closure phase. This is significant, especially with regard to a number of engineering projects, whereby monitoring of the project outcome should be conducted to establish the viability of the project. Thus it is for this reason that all communication files that are generated during the project lifecycle should be kept and stored in a secured environment in case they may be needed in future. Project experts argue that the key indicators of project sustainability rely on the ability of project team members to keep track of all the records that are generated during the project cycle. The availability of these records ensures that the project can be monitored, audited and corrected in order to enhance its quality for a longer period of time. Therefore, the project stakeholders at the life assurance company were asked whether or not they keep or save all communication records that are generated during the FMU project lifecycle. As indicated in Figure 25 below, 95 percent of them stated that they protect these communication files, while 5 percent of them stated that they do not keep these files.
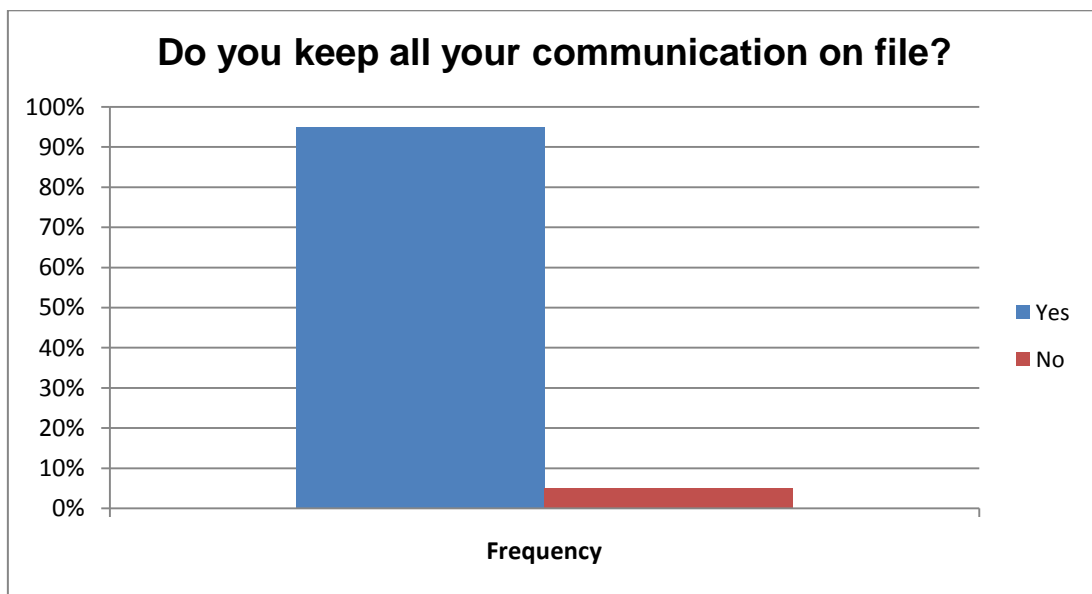
Figure 25: Communication archival materials kept for future reference

4.8   Communication and project stakeholder needs

The findings of the study discussed thus far suggest that from initiation phase to the close off phase of the project stakeholders use a different medium of communication to address two important elements in the project, namely (1) to meet the needs of the requirements of the project; and (2) to specify how the project goal must be accomplished. As highlighted in

Chapter Two, project stakeholders have specific needs that they desire to be accomplished in the project. Ideally, these needs should be communicated in order to enhance the quality of the project. The chapter provides evidence that FMU project stakeholders prefer to use different mediums of communication to receive and send information. For instance, FMU project stakeholders prefer email as a method of communication; while others use the fax, telephone, meetings and verbal communication as modes of communication in the project. Each of these communication modes is used to achieve specific needs in the project. This analysis correlates with project management authors who argue that "project managers spend most of their time engaged in some communication, be it in meetings, writing memos, emailing, sending faxes, reading reports or talking with team members, senior managers, customers and clients''. It is crucial to highlight that communication is essential during the project. It was, therefore, worth asking the FMU project stakeholders whether or not they perceive any connection between communication and their needs. The need, in this context, refers to the project quality.
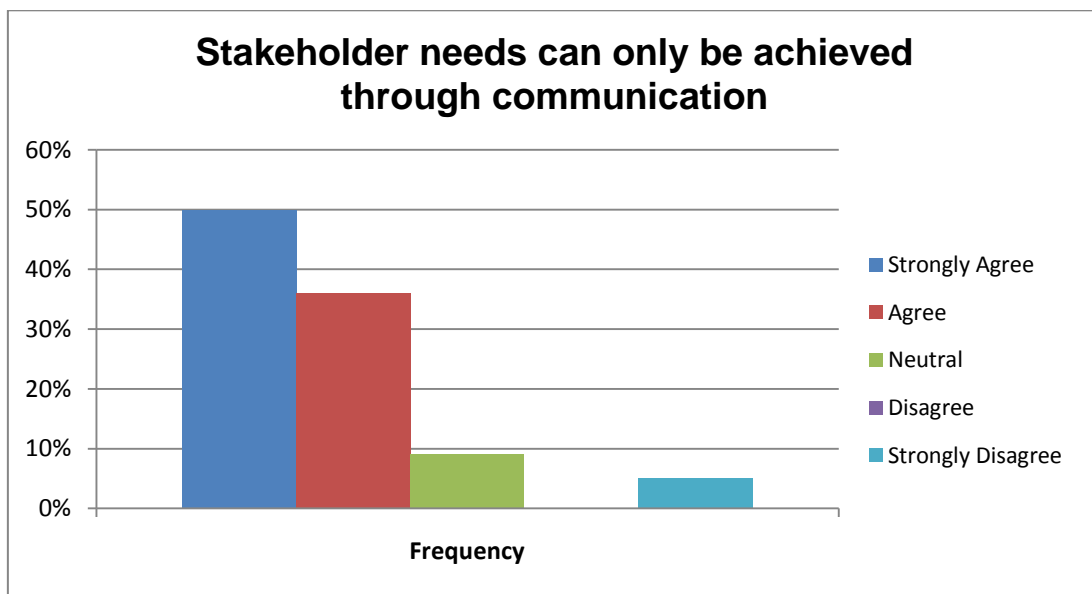
Figure 26: Stakeholder needs realised through communication

It is fascinating to learn, as indicated in Figure 5.18 above, that a larger proportion of the respondents across FMU project stakeholders agreed that there is a stronger link between communication and the needs of the stakeholders. For instance, 50 percent of the respondents strongly agreed, while 38 percent agreed and 12 percent remained neutral. It is important to mention that the last category of response (neutral) appeared to be so because the respondents were not knowledgeable of the subject, or have not dealt with any situation of a similar

nature. When asked about a specific project situation whereby communication affects or connects with project quality, one of the respondents said:

> One does not need a rocket scientist to figure out whom to talk to and how if there is any technical problem in an escalator project, especially the building. Companies involved in projects always provide their details (Name of the company and the contact details) during projects, to allow anyone to communicate to the relevant parties during the project.

> After the project completion escalator, companies provide a number that users can use to communicate with them in case of any emergency or fault, because if the escalator is not working, it affects the daily operations of the people in the building. If the matter is not communicated, then the day-to-day business operations of the tenants are affected.

Therefore, the above insert provides an empirical insight, into the FMU stakeholders viewpoint that communication affects the quality of the project. It is clear, as narrated above, that the respondents value communication when it is required to meet their needs. This also applies when the project is running, in particular, when some stakeholders' feel that their needs are not being addressed with regard to the project. There is also evidence that some stakeholders tend to value communication during certain stages of the project lifecycle. Others believe that communication at an initial phase could achieve the required quality, while some hold the view that the final stage is critical to obtain the desired project outcome (quality). Similarly, some claim that quality should be achieved by communicating with only a few stakeholders, while others argue that all stakeholders should be involved in project decision-making in order to achieve the required quality in the project. It is for this reason that only 65 percent of the respondents strongly agreed that there should be communication with all stakeholders in order to achieve the project's desired goals, while 35 percent agreed (see Figure 27 below).
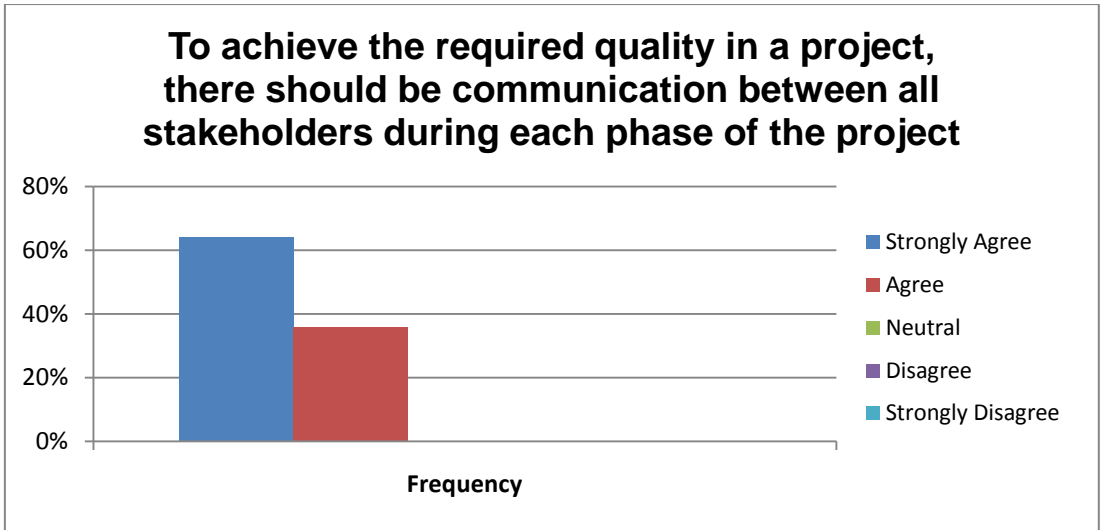
Figure 27: Quality achieved through communication

While Figure 27 depicts respondents who stated that they strongly agreed that the required project quality can be achieved by communicating with all stakeholders, it was important to ask specific FMU project stakeholders whether or not communication does, in fact, determine the quality of the project. This question was asked with specific reference to the FMU projects.
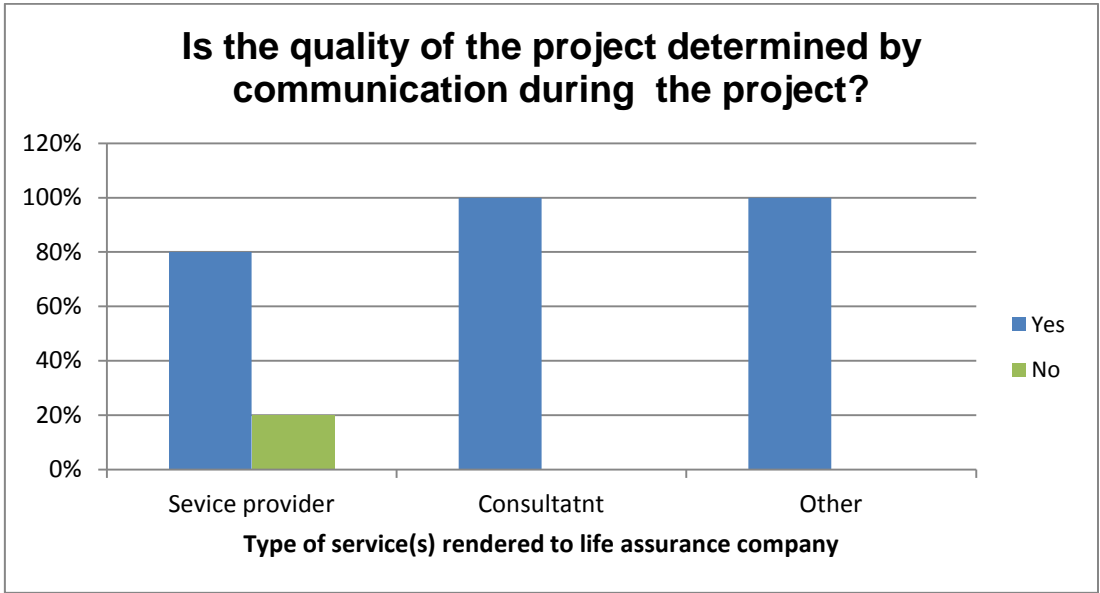
Figure 28: Project quality and project communication

The results shown in Figure 28 indicate that 100 percent of the consultants and other stakeholders agreed that communication is a prerequisite of project quality. Conversely, 80 percent of the service providers also agreed that project quality is determined by

communication, while only 20 percent of them disagreed that communication is a determinant factor of project quality. Given the above analysis, there is a strong view amongst stakeholders that communication is crucial in order to realise project goals and objectives, which will ultimately meet the needs of the clients. It was also fascinating to learn, unlike the popular notion motivated by the techno-centred view of project management, that communication, in addition to cost and time, does affect the quality of the project. One of the respondents acknowledged that cost and time do affect the quality, and also added that if there is no communication about how much will be spent and for how long among the stakeholders, that the project amounts to a failed project. In the case of the FMU project, it was crucial to find out whether or not all modes of communication do indeed help to improve ultimate project quality.
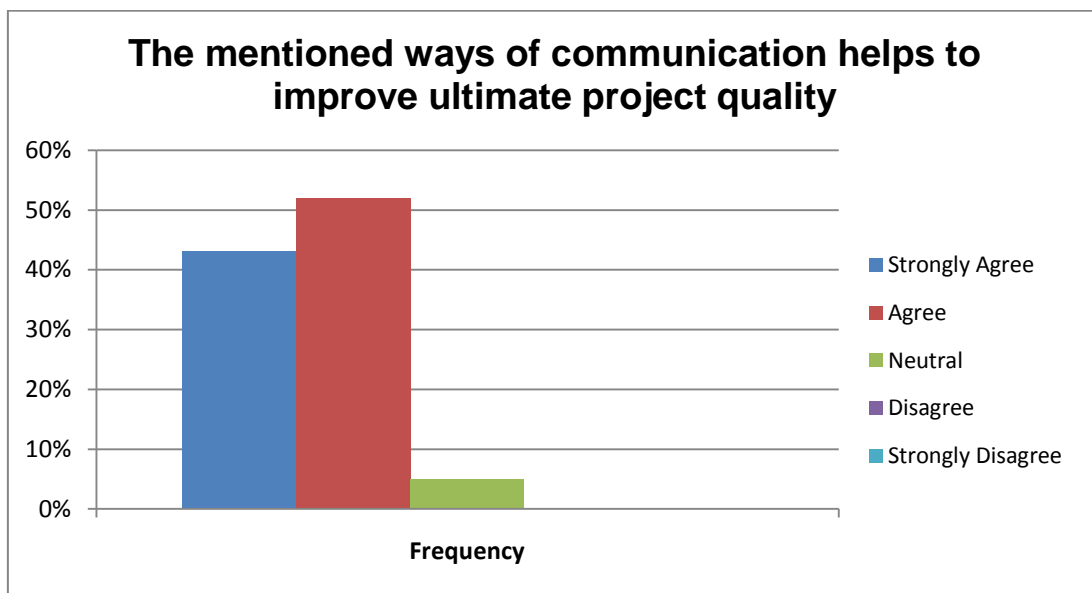
Figure 29: The role of Communication in improving project quality

As indicated in Figure 29 above, 52 percent of the stakeholders agreed that all forms of communication improved the quality of the project, while 43% of them strongly agreed. Of these, only 6 percent of them remained neutral. Once again, the results in the above graph also support the notion that communication is crucial if it enhances project quality. As one of the respondents stated, communication allows the sharing of knowledge, information and resources, which are necessary for the success of the project. This success of the project is the ability of the project to meet the needs of stakeholders, including the client. In the context of this study, project success and stakeholder needs are the key components of project quality. As shown in this section, project quality can be obtained if stakeholders communicate

effectively about how resources, time and other project elements should be utilised and shared in order to the achieve the project's desired outcomes.

4.9   Conclusion

The data analysis presented in this chapter outlined the information that was gathered during the focus group sessions and the completed questionnaires by different stakeholders. The results indicated that communication is used throughout all stages of the project, from the inception to the handover stage. No project can begin without any form of communication. Communication is not ranked at the top of the list in the nine PMBOK knowledge areas, or even included on the four project constrains (time, cost, time and quality being recently added), hence when a project begins, few companies have a project plan communication strategy, but no project goal can be achieved if there is no communication.

The scope of the project can only be achieved if there is clear communication, which provides a detailed plan, what should be done, when, by whom and how. If this information is not clearly communicated, then the quality of the project will be compromised

The next chapter will present conclusion remarks and recommendation to further elaborate the results of the study in relation to the impact of stakeholder communication on project quality.

Chapter 5: Stakeholder Communication and Project Quality

5.1   Introduction

The data analysis presented in the previous chapter shows that communication is used throughout the FMU project life cycle. The data that was collected for this study thus far challenges the current state of knowledge in the field of project management. As stated in Chapter Two (literature chapter), project management as a field of enquiry has not as yet paid adequate attention to the role that communication plays in affecting project quality.

The views of the client must be taken into account during project preparation. It is, however, significant to note that this analysis paid little attention to how the views of the client (end-user) should be incorporated into the project, not to mention how the clients' (end- users) views influence or affect the project quality. While this analysis is illuminating, it is also important to note that in the field of project management, although project quality, is defined, it does not articulate how quality is linked with communication. Therefore, this study used empirical evidence to demonstrate how communication affects project quality.

5.2   Project decision making and Power dynamics

It is important to mention that decision making during project projects is mainly determined by levels of power and interest in the project. It is within this context that the study further argues that FMU tenants and other end-users fall into the bottom hierarchy of communication in the FMU project. This varying level of communication in a project has a bearing effect on project quality. Ideally, tenants are supposed to reach at least the highest level of communication because they are the ones that inherit the final product upon project completion. The question was posed regarding why key stakeholders as tenants appeared to not reach the highest level of communication. The answer to this question leads to the argument that, in fact, the level of communication is often determined by the nature of power and the ability to use it to advance one's interest in the FMU projects. For instance, the study's results suggest that all stakeholders, including the tenants, were engaged in some forms of communication, which relate to the project. However, it was also discovered that the level of communication and the ability to influence the project process was not the same. Of

all the forms and levels of stakeholder communication that were identified in the FMU project, passive communication was what was used to keep tenants in the loop, while a large number of consultants' contractors and suppliers were interactive and self-mobilised. The lack of robust and meaningful participation by tenants in the FMU project clearly led to undesirable project outcomes, which played a significant role on how the tenants perceived the quality of the project.

The Power versus Interest grid provided a working model to further conceptualise the effect of communication on FMU project quality. The adopted model, informed by data that was collected from the study, suggests that those stakeholders who are informed via general communications, for example, mail shots administered by the FMU desk, felt less powerful and less important than project stakeholders. Even though projects 'which are executed at the life assurance company are technical, it appeared that tenant stakeholders should be allowed to participate in a project from the initial phase to the final phase. This was seen as important in order as to ensure that they (tenants) can develop a sense of stewardship towards the project. Apart from this, they can understand decisions that are taken throughout all the stages of the project, and why some of them are executed in a certain manner.

5.3   Concluding remarks and recommendation

Indeed it is clear, based on the findings of this study, that communication affects project quality. The basis for the formation of this study was informed by a serious lack of research in the area of communication and project quality. While Burke (2009:291), in his popular text stated that project managers spend ninety percent of their time in some form of communication, it was not clear whether or not his analysis postulates that communication affects the quality of a project. It is within this context that the study posits to investigate the effects of communication on project quality. The study has achieved its aim by using the FMU projects at a life assurance company as a point of departure. At a literature level, Chapter Two demonstrated that the current literature does not explicitly analyse the connection between communication and quality. It became clearer that this myopic focus is owing to the fact that project quality, as a concept, has ever since been narrowly defined based on three variables: time, cost, and quality. Therefore, the study moves beyond its analysis to define project quality as the extent to which the project deliverables meet the needs of project stakeholders, especially project end-users or clients. For these needs to be

incorporated into projects, there must be communication with these stakeholders at least throughout the project lifecycle.

5.3.1 Communication channels used at the life assurance company during FM projects

While this topic has been systematically neglected, at least by various scholars in the field of project management, the key findings for this study, however, indicate that communication has been used throughout all stages of the FMU projects. It is important to note that forms of communication such as the scope, technical drawings, telephone calls, emails, and faxes were cited as important means or channels of engaging various stakeholders in the project.

However, the extent to which communication directly affects project quality was not clear to some stakeholders. While this may appear as a concern, it is crucial to mention that all their narratives of FMU project communication examples, as well as their pitfalls in terms of quality, suggest that communication affects project quality. As demonstrated in Chapter Six, these pitfalls were a result of a lack of communication between the technical project managers and tenants or other end-users of the FMU project.

5.3.2 Communication and its effect on the quality of projects at the life assurance company

At a broader level, private and public institutions are increasingly mandated to incorporate some forms of communication in their projects. In the case of South Africa, there are a number of policy and legislative frameworks, which compel project managers to conduct public participation prior to project implementation. These include, but are not limited to: the Development Facilitations Acts (DFA) of 1996; the Municipal Systems Act (MSA) of 1998; and the Spatial Development Frameworks Acts (SDF) of 1996. In particular, these policy and legislative tools are essentially informed by concepts of sustainable development with a particular focus on ensuring that current development, through project management, should consider future generations. Due to these recent trends it is clear that the idea now is that project management should seek to incorporate all aspects and forms of communication to ensure that project deliverables appeal to all project stakeholders, particularly project clients. Thus, there is an urgent need to recognise project stakeholders, especially end-users across generations. What is the interest of both current and future generation project end-users and

stakeholders? And what costs would potentially be transferred to them as a result of poor project planning, which is caused by a lack of communication during the project lifecycle? These are remnant questions that should be addressed in the field of project management.

Due to the technical nature of the project under operation, there is a resurgence of evidence, including the one that generated from the study that projects, which operate with total disregard of stakeholders tend to not to appeal to the intended stakeholders. In fact, their pitfalls become more visible in the long run. In this instance, the first generational end users of the project may not complain about nor recognise the negative effects of the project, but as time goes by, the effects begin to emanate. Such situations have already been observed in other parts of the world where housing and dam projects (of the highest magnitude) were completed with great admiration. But as time passed, the effects, which point to the quality of the project, are now haunting the current generation's end-users. In conclusion, given the findings of this study, it is clear that communication does affect project quality, if quality should be defined as the ability of a project to meet the needs or interests of the clients. Therefore, there is a strong correlation between communication and project quality. These two critical concepts are pertinent in areas where stakeholder interests are crucial in a search to improve the sustainability and quality of the project. While the study has managed to demonstrate this congruent, more research is required in this area, especially in projects that are initiated by the public or by state entities.

Based on the findings of the study, there are quite a number of gaps that were identified, which should be addressed at least at both conceptual and practical levels of project management. The study has opened a huge area of research that is yet to be conducted in a search to harmonise communication and project quality. Therefore, the study provides the following recommendations for further consideration in the field of project management.

5.3.3   Stakeholder communication

In the early stages of the project lifecycle there is a need for the formulation of a project stakeholder communication plan, which should be an integral part of the project scope. The purpose of this plan will indicate how project teams will engage or communicates with each other across all levels of stakeholders, including their representatives. This means that prior to the formulation of the project scope, stakeholders must have some form of stakeholder

engagement contract, which binds contractors, engineers and other technical project stakeholders to adhere to the Stakeholder Communication Plan (SCP).

5.3.4   Incorporation of communication into project quality

The study has demonstrated that communication is one of the crucial elements of project quality. Therefore, communication should be treated with high regard in terms of cost, scope, quality and time, because without communication, the project's goals will not be achieved. This means that some standard of measurements equal to those used in the past should be formulated in an attempt to assess how communication can be used to improve the quality of the project. Thus the PMBOK should rate communication as one of the top areas in the knowledge areas.

5.3.5   Stakeholder interest and project quality

The study also revealed that most of the FMU projects compromised quality owing to the fact that tenant stakeholder interests were not communicated effectively during the project lifecycle. As a result, project delivery did not meet the needs of the tenants, yet the projects were successfully completed in terms of adhering to time, scope and costs, which are associated with these projects. Therefore, there is an urgent need to recognise that project stakeholder interests should be' communicated during the project lifecycle. Irrespective of their knowledge, power, and resources, laymen stakeholders should participate in every decision that is made concerning the project. Various communication strategies and channels should be utilised to engage all stakeholders in the project. For instance, in the case of the FMU, the project team should arrange focus group meetings and other means as avenues to allow interactive and self-mobilised forms of communication so that all stakeholders (including tenants) participate meaningfully in project decision making prior to the inception of the project, and until project completion. This means that tenants should be well informed about projects and the reason why projects are executed.

5.4   Conclusion

At least at a theoretical and empirical level, there is an increasing awareness that stakeholder communication in any project tends to improve the efficiency and the effectiveness of the

project. While stakeholder communication is regarded as the cornerstone of project success, it is crucial to note that stakeholders in a project or organisation do not participate or communicate at the same level in project decision making. Due to varying levels of knowledge, power, and access to information about the project, it is clear that certain stakeholders are, by default, systematically excluded from project decision-making, perhaps owing to the fact that they do not possess the same level of knowledge and power, which is necessary to influence the project outcome. This does not necessarily mean that those stakeholders (especially those excluded by virtue of their knowledge and power) do not have any interest in the project. In the case of the currently "debated" e-tolling project in Gauteng, it is a well-known fact that the project was managed and implemented by project engineers who adhered to all project rules and scope contained in the terms of reference for the project. While the project process complied with the normal technical project protocols, it has, however, appeared that the project end users (motorists in) are not satisfied with the project outcome, which was not properly communicated to them during the early stage of the project. Therefore, the same phenomenon has played out in the case of the FMU project process and the participation of various stakeholders in the project. This is because, as stated in Chapter Two, the language of democracy and participation of stakeholders has of a penetrated every part of the world, including the field of project management. This has been because fundamental shift in development and business thinking over the past twenty years, which seeks to move from being capital-centred to people-centred. Thus, this shift is also based on a radical shift in emphasis from external or expects professionals (because they are deemed to be more knowledgeable than others), to stakeholder engagement with a particular focus on project stakeholder interest rather than being mere project expert or professionals.

The findings of the study suggest that the FMU project stakeholders at the life assurance company utilise various forms of communication throughout all stages of the project. While this is welcoming, it was also discovered that the level of communication as means of engaging stakeholders in the project decision making, is often not equal. While project engineers hold technical information and knowledge about the project, the study discovered that this technical knowledge is not complete if communication with other stakeholders has not been conducted to realise the desired project deliverables. For instance, the tenants (FMU project stakeholders) at the life assurance company are engaged in a project through some form of communication at the bottom-line of project decision making. Although tenants are regarded as crucial project stakeholders in the FMU project process, it was, however,

surprising to learn that they (tenants) are not actively engaged in some form of interactive communication to influence decision making during the project lifecycle. It is thus within this context that some projects did not provide an outcome that was appealing to the tenants – a lack of communication with tenants to decide on the scope and type of project delivery or outcome has serious ramifications for project quality.

As stated in Chapter Two, regarding the narrative of the historical development of project management, the inclusion of communication in project decision making has always been hindered by the technical nature of the project itself. Project briefing, reporting, and implementation are highly technical and procedural, where decisions are made by technical experts with high disregard of the inputs from a range of stakeholders. Due to the fact that most of the FM projects are technical in nature, it was not surprising that the level of communication to influence project decision making would indeed be skewed. Thus, the study discovered that the FMU project context has allowed an environment in which experts with technical knowledge about the project dominate the decision making process throughout the project's lifecycle at the life assurance company. Therefore, the study argues that projects where experts dominate all aspects of the project at the peril of other stakeholders often fail to satisfy their clients' interests. This is because clients (project stakeholders) are offered any space in which to communicate their needs to ensure that they are incorporated into the project lifecycle. It is within this context that this conception of project management developed and continued to privilege certain stakeholders while excluding others to achieve project goals. Hence, it is important to mention that FMU project management operations are, to a great extent, not immune from this anomaly.

While the FMU projects at the life assurance company were initiated by using contemporary and cutting-edge technology to allow effective communication, the study revealed that key decisions that were made in the project were often driven by technical discourses and practices. In many cases stakeholder participation, via communication, was given preference to technical engineers and experts to decide when and how the project should operate. As a result, tenants (project end users or key stakeholders) at the life assurance company were often neglected in project decision making, because they lack the technical knowledge, which is necessary to participate in projects' technical oriented decision making.

5.5   Future study

Due to the fact that this study was conducted at a life assurance company, which is a private organisation, there is a need to conduct further studies of this nature in projects which are operated by the government.

For instance, with reference to the low cost house and service delivery development project, there is a view that the violent strikes and dissatisfaction of the local communities are a result of a lack of communication. It is not clear whether or not communication during the early stages of these projects would have improved the quality of these projects.

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Appendix A: Ethical Consideration for a Questionnaire
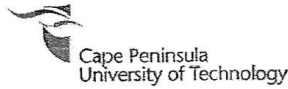
Faculty of Business
Ethical considerations for a questionnaire
Cape Peninsula University of Technology

Tick One Box: Staff Project
× Postgraduate Project (Masters and Doctoral level)
   Undergraduate Project (ND & BTech level)

Title of Project: **The impact of stakeholder communication on the quality of facility management projects at a life assurance company in Western Cape.**

Name of researcher(s) **Mabatho Zungu____**

Name of Supervisor(s) (if appropriate). **Stanley Fore_**

		YES	NO	N/A
1	Will you describe the main experimental procedures to participants in advance, so that they are informed about what to expect?	X		
2.	Will you tell participants that their participation is voluntary?	X		
3.	Will you obtain written consent for participation?	X		
4.	If the research is observational, will you ask participants for their consent to being observed?	X		
5.	Will you tell participants that they may withdraw from the research at any time and for any reason?	X		
6.	With questionnaires will you give participants the option of omitting questions they do not want to answer?	X		
7.	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	X		
8.	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?	X		

If you have ticked No to any of Q1-8, you must ensure that the reasons for this are made explicit in your project proposal. [Note N/A = Not applicable].

		YES	NO	N/A
9.	Will your project involve deliberately misleading participants in any way?		X	
10.	Is there any realistic risk of participants or researchers experiencing either physical or psychological distress or discomfort? If yes, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).		X	

If you have ticked Yes to Q9 or Q10 you should ensure that your proposal describes in sufficient detail the appropriate procedures and provides a scientific justification for their inclusion. You should also identify alternative methodologies and outline the reasons why they were deemed inappropriate.

			YES	NO	N/A
11.	Does your project involve work with animals? If yes, you should also investigate whether you require approval from the S.A. Health Professions Council and/or related organisation? Provide the answer to this in your proposal			X	
12.	Do participants fall into any of the following groups? If they do, refer to professional body guidelines and include some reference to these in your proposal.	Children (under 16 years of age)		X	
		Schoolchildren of all ages.		X	
		People with learning or communication difficulties		X	
		Patients		X	
		People in Custody		X	
		People engaged in illegal activities (e.g. drug taking)		X	

		YES	NO
13.	Does your study include administering a Psychometric test(s)? If yes, name the test (s) and describe your or your supervisor's competence to administer such tests.		X

		YES	NO
14.	Will your study involve *any* contact with *any* external institution? If yes, your proposal will not normally be approved unless you submit a letter of confirmation from the person responsible for this institution that they are happy for you to conduct your study on their premises and/or contact their staff and/or people who use the service.	x	

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There is an obligation on the lead researcher to bring to the attention of the Faculty of Business Ethics Committee any issues with ethical implications not clearly covered by the above check list.

PLEASE TICK **EITHER** Statement **A** OR Statement **B** BELOW **AND PROVIDE THE DETAILS REQUIRED** IN SUPPORT OF YOUR APPLICATION. THEN PRINT OFF AND SIGN THE FORM

	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 <u>Faculty of Business Ethics Committee</u>, 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.**	
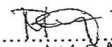
If you ticked <u>Statement B</u> then please provide all the further information listed below in a separate attachment.
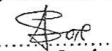
1. Your Name
2. Title of project
3. Purpose of project and its academic rationale.
4. **Full** description of methods and measurements
5. Participants: recruitment methods, number, age, exclusion/inclusion criteria
6. Consent and participant information arrangements, debriefing. **Please attach intended information and consent forms.**
7. A clear but concise statement of the ethical considerations raised by the project and how you intend to deal with them.
8. 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.**

I (student and/or supervisor) am familiar with the ethical practices in research.

I am familiar with the Cape Peninsula University of Technology Guide to Post Graduate Studies and Guidelines for Research Proposals.

Signed ....
Print Name..MABATHO....ZUNGU
Student Number..209153711....
Date....26..March..2012....
(Undergraduate/Postgraduate researcher(s)/student

Signed ....
Print Name...STANLEY..FORE
Date...26/03/2012
(Lead Researcher or Supervisor)

APPENDIX B: LETTER OF PERMISSION TO CONDUCT RESEARCH

OLD MUTUAL

Mutualpark, Jan Smuts Drive, Pinelands 7405.
PO Box 66, Cape Town 8000, South Africa.
Tel +27 (0)21 509 9111, Fax +27 (0)21 504 7630
www.oldmutual.co.za

13 March 2012-03-13

To whom it may concern,

Cape Peninsula University of Technology
Faculty of Business
Department of Management & Project Management
Cape Town Campus

Dear Sir / Madam,

Re: Permission to use Old Mutual – Corporate Property Management (CPM) as audience for MTech Business Administration in Project Management Research – Mabatho Zungu

This letter serves to grant permission to Mabatho Zungu (Student Number: 209153911) to canvass the opinion of CPM staff towards the research effort in fulfilment of the MTech Business Administration in Project Management at CPUT.

The active research is to take place in the first and second semester of 2012. Any further requirement to engage the staff at CPM for the purpose as stated will need to be approved by CPM.

Such research activities are not to negatively impact on the operational and daily duties of the staff at CPM, as well as the reputational image of the department.

Yours sincerely,

Mr Khiyam Fredericks
National Technical Manager
Corporate Property Management
Kfredericks2@oldmutual.com
TEL: (021) 509 2032

Mr. Shaik Motlekar
Risk & Compliance Manager
Corporate Property Management
smotlekar@oldmutual.com
TEL: (021) 509 2032

Appendix C: CPMU Survey Results – Mutual Park 2013

OLDMUTUAL

Corporate Property Management Survey Results – Mutualpark 2013

2 Research Brief and Methodology

Methodology behind this Report

The synopsis slides provide an overview of all responses given for the survey. There were 3172 responses within the database by the close of the survey.

The results shown within this report are representative of all the responses given. Where the question asked was the same as that of the previous survey, this year's results have been benchmarked against previous results.

As per previous years surveys the 5 point Likert scale was changed to a satisfaction percentage:

Strongly Agree / Excellent = 100%
Agree / Good = 75%
Neutral = 50%
Disagree / Fair = 25%
Strongly Disagree / Poor = 0%

This year Corporate Property Management received the highest score yet for the survey of 72.1% across all questions. This is an increase of 1% on the previous year.

PureSurvey
innovative research solutions

Appendix D: Questionnaire Survey

Questionnaire for M-Tech Thesis:

The questionnaire was sent to participants and was also used as a guideline for the interview and focus groups.

The impact of communication on the quality of facility management projects in a life assurance company in the Western Cape, South Africa.

The objective of the questionnaire was to find out the method of communication, type of communication, how communication is filtered down during projects and how communication can impact the quality of facility management projects. Complete your responses in the provided spaces and/or tick the appropriate boxes, where necessary.

Section 1

Profile

1. Current position? (If an Old Mutual facility manager, please complete section 2 only).
----

2. How long have you been in this position?   ---
   A. One year or less   ☐
   B. One to three years   ☐
   C. Three to five years   ☐
   D. Five to ten years   ☐
   E. More than ten   ☐

3. Gender: --

4. Highest level of education? --

5.   What type of service(s) does your company render to Old Mutual facilities?

A. Service provider ☐

B. Supplier ☐

A. Consultant ☐

6. For how long have you been involved in facility management projects?

A. Less than a year ☐

B. Two to five years ☐

C. More than five years ☐

D. Five to ten years ☐

E. More than ten years ☐

Project briefing

7. How is your company invited to participate in facility management projects?

A. Telephone ☐

B. Fax ☐

C. Email ☐

D. Letter ☐

E. Verbal or meeting ☐

8. What method of communication does your organisation use to respond to the invitation from the facilities department?

A. Telephone ☐

B. Fax ☐

C. Email ☐

D. Letter ☐

E. Verbal or meeting ☐

9. Is this your preferred way of communication? Give a reason/s for your response. ------

----

----

10. Is the project scope clearly communicated/ defined?--

----

11. At what stage/phase of the project is your company invited to the project?---------------

----

----

12. Does your organisation receive follow up communication on appointment for

projects?---

----

13. Is this formal communication?
    A. Yes   ☐
    B. No   ☐

14. Would you like to receive more frequent communication from facilities?

    A. Yes   ☐
    B. No   ☐

15. Please provide an explanation for the answer that you provided in Question 14?--------

----

----

16. Does your company have communication plan for projects? -------------------------------

----

----

3. Communication during the project

17. How often do you receive a communication during the project? ---------------------------
----

----

18. Do you attend project meetings?--

----

19. When there is a decision to be made during the project, do you receive
communication?

----

20. Would you prefer more communication during the project?---------------------------------
----

----

21. Should facilities improve their communication during projects Why/Why not?----------
----

----

22. Do you have contact person that is appointed to handle communication during the
project?
    A. Yes   ☐
    B. No   ☐

23. Is there a project office where all communication is sent, and where issues are
addressed?--

----

24. If you have information to share or a question, who do you send it to? -------------------
----
----

25. How long does it take for the project team to respond to communication that is sent?

     A. Immediately ☐

     B. One day ☐

     C. Aweek ☐

     D. More than two weeks ☐

     E. A month and more ☐

26. What method of communication do you use during handover?

     A. Telephone ☐

     B. Fax ☐

     C. Email ☐

     D. Letter ☐

     E. Verbal or meeting ☐

4. Communication and quality

27. How does your organisation evaluate quality? ---
----

28. Do you think that facilities should improve project communication?

     A. Yes ☐

     B. No ☐

29. Please provide a reason for response in Q28.. ---

----

30. With better communication in place, will your project quality improve?

----

31. Does communication affect the quality of your work? -------------------------------------
----
----

32. Comment on how communication can improve the quality of the project.----------------
----

Section 2:

Questionnaire for facilities team

33. Which discipline are you responsible for?--

----

34. How do you communicate with your vendors?--

----

35. Is your communication formal?---

----

36. Do you file your communication?---

----

37. How do you receive feedback from vendors?--

----

38. If there are issues to be resolved, how do you go about addressing these? ----------------
----
----

39. Does communication affect your projects?---

Do you think that communication can improve the quality of your project? ----------------------
----

Appendix E: Stakeholder Ethical Letter 1

10 Riverstone Court

Riverstone Road

Wynberg

Cape Town

7800

30 May 2012

Dear Participant

STUDY ON THE IMPACT OF STAKEHOLDER COMMUNICATION ON THE QUALITY OF FACILITY MANAGEMENT PROJECTS AT A LIFE ASSURANCE COMPANY IN THE WESTERN CAPE, SOUTH AFRICA

My name is Mabatho Zungu, student number 209153911. I am in the process of conducting research towards an M-Tech degree in Business Administration, focusing on Project Management at the Cape Peninsula University of Technology. The purpose of the attached questionnaire is to gain an understanding of the impact of communication on the quality of facility management projects.

Your participation will be appreciated. Please note that participation in the questionnaire is voluntary.

Please email the completed questionnaire to mabathozng@gmail.com or post to 10 Riverstone Court, Riverstone Road, Wynberg, 7800.

This research study is supervised by Mr. S. Fore of the Cape Town University of Technology.

Thank you for participating in this research.

Yours Faithfully

Mabatho Zungu

Appendix E: Stakeholder Ethical Letter 2

From: Mabatho Zungu [mailto:MZungu@oldmutual.com]
Sent: 24 April 2012 12:25
To: Undisclosed recipients:
Subject: Request for M-Tech stakeholder ethical letter for Mabatho Zungu Student no: 209153911

Good day

I am a graduate at the Cape Peninsula University of Technology, currently in the process of completing an M-Tech (Magister Technologiae) in Business Administration Project Management.

My topic is: **The impact of stakeholder communication on the quality of facility management projects at a life assurance company in the Western Cape, South Africa**. For the purpose of data collection, I will use interviews and questionnaires to obtain information from all stakeholders who participate in facility management projects/work at Old Mutual, Pinelands.

The university's Ethics Committee requested that I obtain a letter of permission from all these stakeholders before the research can be conducted.

If possible, can your organisation grant me a permission letter? I have attached the approval letter from the CPM as an example.

The purpose of the questionnaire is to gain a comprehensive understanding of stakeholder communication in terms of the quality of facility management projects, and not to defile the name of any organisation.

Your assistance will be appreciated.

Thank you.

Yours faithfully
Mabatho Zungu

Appendix F: Ethical Clearance by the Research Unit

Office of the Chairperson **Research Ethics Committee**	Faculty: **BUSINESS**

At a meeting of the Research Ethics Committee on 13 June 2012, ethics approval **was granted to** ZUNGA, Mabatho (209153911) **for research activities related to the** MTech/DTech: MTECH: Business Administration (Project Management) **at the Cape Peninsula University of Technology.**

Title of dissertation/thesis:	The impact of stakeholder communication on the quality of facility management projects at a life assurance company in the Western Cape Supervisor: Mr S Fore

Comments:

Decision: APPROVED

Signed: Chairperson: Research Ethics Committee	13 June 2012 Date
Signed: Chairperson: Faculty Research Committee	Date