Outsourcing of Facilities Management in South African Private Healthcare

Peter A. Schilder

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Johannesburg, 2008

ABSTRACT

Outsourcing is widely regarded as a powerful business process that can be employed to streamline an organisation's operations.

This study explores the outsourcing of Facilities Management in the South African Private Healthcare industry. It probes the functional areas of Facilities Management in this sector with the aim to understand its complexity. It also explores how this complexity would influence functional segmentation when outsourcing of Facilities Management is contemplated. The relative importance of financial and non-financial decision parameters as well as the associated risk of outsourcing is also investigated.

Current thinking was probed through structured interviews with experts in Private Healthcare Facilities Management.

The main findings of this research were that Facilities Management in Private Healthcare consists of many diverse and expert functional areas and should not be outsourced as one function. However, it was found that outsourcing of Facilities Management as multiple functions would increase risk to a healthcare facility. It was further concluded that non-financial drivers are considered to be more important than financial drivers when making the outsourcing decision.

DECLARATION

I, Peter Anthony Schilder, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Peter Anthony Schilder

Signed at ……

On the …….. day of …… 2008

DEDICATION

To my parents, Linda and Peter, who motivated me to do this degree.

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to:

- Mike Pycraft, my supervisor, for his time and direction.

- My fellow class mates, especially Ronald and Anche that helped with motivation through thick and thin.

- The respondents who agreed to rise above the competitive environment to discuss the research topic in detail.

- Michelle Gunter for proof reading the document and helping to evict the inevitable little gremlins.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

B.Sc (Eng)	Bachelors of Science Degree with Engineering as specific area of study
CDVC	Care Delivery Value Chain
MRO	Maintenance, Repair and Overhaul
NHS	National Health Service - the public healthcare service of the United Kingdom
OEM	Original Equipment Manufacturer
FM	Facilities Management
P&L	Profits and Losses
SFA	Spatial Factor Analysis, also known as Principle Component Factor Analysis (PCFA)
RIRI	Relative Importance Risk Index
TBC	Transaction Based Economics
UNISA	University of South Africa

Drucker (1993) made the following comments in his book “Post Capitalist Society”:

> “In the hospital, for instance, the value system is that of doctors and nurses. They are concerned with patient care. No one therefore pays much attention to maintenance work, support work, clerical work – even though that is where half the hospital’s costs are likely to be. Nobody from these support activities will ever get into a senior hospital position.
>
> Most of the women who start cleaning hospital floors or making hospital beds will, 15 years later, still clean hospital floors or make hospital beds. By contrast, the woman who as a senior vice president heads the hospital division of America’s largest maintenance company started as an almost illiterate Mexican immigrant, with a bucket and a broom 14 years ago.
>
> But she started working in a hospital where maintenance work had been contracted out to a maintenance company. As a result, she had opportunities for advancement. But, also as a result, productivity in the hospitals maintained by this company has almost tripled in the last 15 years. The time needed to make a bed, for instance, has been cut by two-thirds.”

CHAPTER 1: INTRODUCTION

1.1 Purpose of the study

The purpose of the research is to determine the viability of outsourcing Facilities Management in the private healthcare sector in South Africa. The research will explore current thinking of healthcare executives.

1.2 Context of the study within Healthcare

Healthcare delivery is an emotional issue internationally and grabs the attention of a nation like few other issues according to Rogers (1999).

Many healthcare models used internationally are based on the American healthcare system, but according to Porter (2006), the failure to deliver healthcare appropriately is nowhere more apparent than in the United States of America. In the application of Porter's Care Delivery Value Chain (CDVC), healthcare delivery components either contribute to healthcare value or they do not. Of particular importance to this research is that it is recognised by Porter that appropriate facilities adds value to this value chain. Although Porter applied his CDVC to the American healthcare industry, it is intuitive that these would be fundamental in providing healthcare anywhere in the world.

Rogers (1999), in pursuit of identifying opportunities of optimising healthcare facilities, further recognised that hospital buildings provide the essential base from which physical patient healthcare can be provided by medical professionals, nursing and paramedic staff. These buildings are supported by fixed services and many of these services are essential for life support. He states that over the previous decade, the complexity, level and demands on support services required by medical care has had a dramatic impact on the serviceability and functionality of hospital facilities. Therefore, there are very few businesses today that have the operational complexity of a hospital. Moy (1995) confirms this notion by stating that these facilities are among the most challenging and costly buildings to design, construct and to manage. Due to this

complexity, it is possible that many South African private healthcare facilities have not been able to formulate a Facilities Management (FM) strategy.

1.3 Context of the Study within Facilities Management

The literature is rich with studies about outsourcing. Kremic *et al* (2006) reviewed a vast amount of literature on outsourcing in general. Literature about healthcare outsourcing usually bundles all non-core services together, creating the perception that it should be managed as one entity.

Healthcare service provision can be divided into clinical and non-clinical functions according to Heng (2005). Clinical functions are those that provide care and cure services to patients. Non-clinical functions are those supporting clinical functions. This includes amongst others, Facilities Management. FM is regarded as consisting of two fundamental areas, that of “hard services” requiring professional input such as engineering and the “soft” services that are of operational significance such as housekeeping-, security- and laundry services. Most of these perform critical functions in a modern hospital and requires specialist skills.

With advances in technology in healthcare as well as the inherent expectation of the reliability of life support systems, these “hard services” have become increasingly integrated and complex. Life support systems include all equipment and utilities that are required to support human life – failure of which will result in death without clinical intervention. Public perception deems failure of these systems as unacceptable. To ensure ultimate reliability and sustainability of life support and other systems, a focused engineering approach is required. Such expertise is not normally associated with FM.

1.4 Context of the study within South African Private Healthcare

In South African private healthcare, the FM function has not been uniformly defined.

Following the outsourcing of the management of all physical infrastructure of the Albert Lethuli Hospital, a public healthcare facility in KwaZulu-Natal in South Africa, the notion that all FM functions in the private healthcare sector could also be successfully outsourced has been contemplated. Over the past decade, services such as housekeeping, security and laundry have been outsourced individually. Due to the specialist nature of some of the normal FM functions, such as Technical Services, there has been a reluctance to outsource it. Reasons for this include:

1. The complexity of healthcare FM and the limited skills in the industry to initiate the process. This has led to limited understanding of the boundaries and detail content that resulted in inappropriate financial modelling of the domain.

2. The perceived risk of doing so.

3. The limited risk mitigation that such outsourcing would provide as the facility would always bear liability for assets.

This study will explore current thinking of executives in the private healthcare industry with specific reference to Facilities Management and the outsourcing thereof.

1.5 Problem statement

1.5.1 *Main problem*

The purpose of the research is to determine the appropriate scope and functions of Facilities Management in private healthcare in South Africa and to identify the financial and non-financial variables that would aid in the outsourcing decision making process.

1.5.2 *Sub-problems*

The first sub-problem is to define the scope and functions of Facilities Management in the South African private healthcare environment and to search for similarities that would group functions together with the objective of simplifying the outsourcing decision.

The second sub-problem is the identification of financial-, non-financial- and risk variables that will aid in the decision making process to determine whether or not to outsource the above Facilities Management functions.

1.6 Significance of the study

The study will fill a gap. An initial literature scan revealed that much work has been done in the general field of healthcare FM outsourcing in the rest of the world, yet there seems to be very little evidence that it has been explored in South Africa.

The business of private healthcare in South Africa is facing an ever increasing competitive environment due to changing legislation. Consistent with other industries, restructuring and business re-engineering has been embraced as mechanisms to streamline the industry.

In terms of the capital investment in healthcare infrastructure, the Hospital Association of South Africa (HASA, 2007) reports that the private healthcare sector utilises infrastructure with an estimated replacement value of R19 billion to provide healthcare. This estimation is seen as conservative as HASA represents only 90% of the industry. Given the financial impact of inappropriate management of these assets, the study is financially significant.

Due to modern demands placed on supporting services, Rogers (1999) states that these buildings were not only expensive to build in the first place, but that the technical contents of these facilities are also increasingly expensive to provide. As Facilities Management is the function that essentially manages this infrastructure, it can be assumed that the long term impact of inappropriate management can be significant. Due to the high impact of infrastructure

availability on the private healthcare business, sustainability of services has become a big focus and additional understanding to achieve this optimally will add significant value to the industry.

Although not yet significant in South Africa, the medical-legal risk associated with operating life support equipment can also be high. This risk can be mitigated by appropriate facilities and asset management. Understanding these risks and how to mitigate them appropriately in a South African context will add significant value to industry.

1.7 Delimitations and limitations

1.7.1 *Delimitations*

This study will be applicable only to the private healthcare sector in South Africa and will therefore specifically exclude the public sector.

Creswell (2003) also recommends that delimitations should also be made with regards to the type of research design. From the initial literature review on the subject, there appeared to be no research previously done in this specific field in South Africa. With a limited number of industry experts available, the research will be qualitative.

1.7.2 *Limitations*

Private Healthcare in South Africa is dominated by three large hospital groups. They make up more than 87% of the private healthcare sector. The remaining 25% consists of many small groups of hospitals as well as independent facilities. Due to the relative value of the smaller groups' infrastructure and the limited focus on managing it, this research will be limited to the three large hospital groups as well as established private groups consisting of more than five facilities.

1.8 Definition of terms

For the purpose of this report, the healthcare environment will refer to the private healthcare environment in South Africa. Private healthcare will be defined as all healthcare facilities where its equity is privately funded as opposed to being owned or funded by government.

The domain of Facilities Management, as defined in literature, is very broad. In terms of this research, Facilities Management will be as defined by McLennan (2004) to include market segments relating to property, the built environment, catering, cleaning security and engineering services. It is seen as the part of the business that supports organisational activities and this would include activities that maintain support services and physical infrastructure. Facilities Management is seen as the "managerialisation" of the built environment professions.

Soft Facilities Management functions will refer to services relating to housekeeping, security and laundry.

Hard Facilities Management functions will refer to those requiring professional input. These include mechanical, electrical and civil engineering services required to operate and maintain facilities, plant and equipment. Due to the specialist nature of the equipment used in healthcare, a dedicated function concentrating on the management of medical equipment has emerged and is included in this domain.

The definition of outsourcing in itself has created much debate and was contemplated by Gilley and Rasheed (2000). They proceeded to define outsourcing as "procuring something that was either originally sourced internally (i.e. vertical disintegration) or could have been sourced internally notwithstanding the decision to go outside (i.e. make or buy)".

1.9 Assumptions

It is assumed that there are financial as well as non-financial variables that will influence the outsourcing decision. This assumption is supported by Kremic *et*

al (2006) in a literature review of benefits derivable from outsourcing. Sixteen benefits are identified, each supported by numerous references. A table, differentiating between financial and non-financial benefits is published in Appendix 1. Inspection reveals that twelve of the sixteen benefits are non-financial.

It is assumed that the decision factors for outsourcing will be similar for the public and private healthcare sectors not only in South Africa, but internationally. The ultimate weighting of each of these factors as well as the relative contribution to the final decision process may be different. The reasonableness of this assumption is based on the fact that healthcare infrastructure is very similar in the public sector as well as abroad. Slight differences may exist due to different skill levels and the level of technology deployment, but these are regarded as subtle and with very little sensitivity to the outcome.

The assumption is made that the outsourcing decision would be based on consistent decision variables for all the private role-players. The three large healthcare groups have facilities of similar size and it would be assumed the same business drivers would be applicable to ensure appropriate infrastructure management. Due to the size of the three large groups, it is also assumed that the medical service delivery types are similar based on the diverse scope of services per facility. This may be a reasonable assumption to make as the groups are almost the same size in terms of number of beds - a reasonable measure to compare infrastructure size. It would however be unreasonable to expect that the weighting of each variable would be same. Given the number of decision factors by Kremic *et al* (2006), weighting of them would be significantly influenced by company strategy. The sensitivity of the research outcome may be large as strategic direction could completely negate some outsourcing decision variables.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This section will explore literature relating to the outsourcing of Facilities Management in healthcare. As this specific area has not been as widely researched as the fundamental topics of FM, various aspects will be explored inside the FM domain.

To understand the realm of FM and exploring the first sub-problem, a literature review will be conducted to explore the functional domain in facilities abroad. It is to be expected that terminology used in South Africa may differ from that used abroad. The review will focus on understanding the reasons for grouping of some technical functional areas and why this is different to that is experienced in South Africa.

Once the functions of FM have been clearly defined, the second sub-problem will be explored through a literature review of the decision parameters that would influence its outsourcing. As this domain comprises of various fundamentally different disciplines, it is envisaged that literature will provide frameworks to test the relevance of outsourcing decision parameters based specifically on required competency. Due to the link between the outsourcing decision and the associated risks, a literature review will be conducted to establish current thinking of the risks associated with outsourcing critical functions.

2.2 Background discussion

The outsourcing decision parameters will be explored through various approaches as there appears to be much richness in literature on outsourcing in general. Kremic *et al* (2006) has reviewed a vast amount of literature on the topic. They cite that outsourcing is a common practise in business and that it is strategically a major element in business. They further put forward that perhaps most organisations by this time have outsourced some functions. Its widespread

occurrence in business may have been the reason why it has attracted the attention of academics; hence it has become a topic frequently commented on. Although Kremic *et al* (2006) reviews literature on all outsourcing, many of the issues may be applicable to the outsourcing of healthcare FM. For this reason, Kremic's work is seen as key to understanding the general mechanism of outsourcing.

2.3 Research Question 1: Facilities Management as a Fundamental Non-core Function

There can be little doubt that a modern hospital is a very complex facility to manage. Moy (1995) provides excellent insight into the different facets of such facilities in the United States. This requires interaction with regulatory agencies (21 different entities are mentioned), an understanding of the types of services provided (59 disciplines mentioned) as well as an understanding of the systems (16 are mentioned). Various dangerous materials and equipment are also used (7 types mentioned). This substantiates the notion that a hospital is a very complex business and that a large degree of organisational management structuring would be required to manage it efficiently.

Al-Zubaidi (1997) supports Moy's observations that the complexity of medical services is increasing and that this is reflected in the complexity of facilities where these services are rendered. He further recognises the lack of focus on hospital facility management, specifically in the United States. The National Economic Development Office already reported in 1955 that maintenance of older hospitals in the United States was reduced to "emergency cover only" due to an anticipated surge of new facilities in the 1960s. It was believed that these new facilities would replace older facilities and would conserve scarce resources, staff and equipment. This decision created a backlog of work relating to infrastructure management and indicates that even in a relatively well managed industry such as the American healthcare industry, long term strategic decisions are not always appropriate. Al-Zubaidi (1997) also reports that this backlog of some FM functions were widening at the time.

McLennan (2004) argues that FM is often misunderstood in the general business sector due to it not being placed inside a mainstream management discipline. His comments would be applicable to the private healthcare sector as FM functions have generally not been merged into one management function. Shohet *et al* (2004) puts forward that competition (as exists in private healthcare) drives the reduction of non-core costs and as a consequence, different non-core activities are integrated into a single function to achieve this. Kremic *et al* (2006) concludes from a literature review that there is increasing evidence that the cost of a service, when outsourced, is sometimes higher than it was before outsourcing it. This may be the reason why the South African industry never integrated FM into a singular function with the view to outsource as is generally done in the United States. Other possible reasons could be the sheer diversity and complexity of functions and possibly also due to a lack of understanding.

Comments by Moy (1995) and Shohet *et al* (2004) could therefore point to an anomaly. On the one hand non-core functions should be integrated to enable efficiencies, yet its components are so diverse that forced integration and combined management would not yield optimal service delivery. The literature at this point suggests that FM components should therefore not be grouped as one function.

This notion is in turn supported by a general concern about healthcare profitability in the United States as raised by Porter (2006). Although the value provided by the American healthcare industry is questioned in general, FM is seen as part of this value chain, hence it would be reasonable to challenge the generally excepted structures and systems as defined in the United States. According to a World Health Organisation (WHO) study, South African private healthcare is considered to be the second most efficient provided in the world. This would substantiate a notion that current practice in South Africa could be a good starting point in defining FM management structures.

2.3.1 *Delineating Facilities Management Functions*

Shohet and Lavy (2004), in their pursuit of developing an integrated facilities management model, described six core domains of FM. These are presented in Table 1. Inspection of the core domains reveals that they were not delineated along functional areas but rather along facility performance reporting parameters.

Table 1: Six Core Domains of FM, Shohet and Lavy (2004)

	Domain
1	Maintenance Management
2	Performance Management
3	Risk Management
4	Supply Services Management
5	Development that includes Strategic Planning
6	Information Technology

In terms of performance parameters, this grouping suggested by Shohet and Lavy (2004) may indeed be applicable to running healthcare facilities efficiently, but may be inappropriate when contemplating tiered outsourcing.

With the above in mind, perhaps it may be more appropriate to group the functions as suggested by McLennan (2004). He cites that FM includes market segments relating to property, the built environment, catering, cleaning, security and engineering services. This can be correlated with the functions as defined by Moy (1995) to create a functionally grouped structure. These functions are delineated along functional areas rather than performance areas as proposed by Shohet and Lavy (2004) and are presented in Table 2.

Heng (2005) explored delineation of Facilities Management functions from the perspective of a brokerage function. In his argument that FM is fundamentally a linking function between different individuals, groups and/or departments, Heng

Table 2: Six FM Functions Grouped by McLennan, McLennan (2004)

	Domain
1	Property
2	Built Environment
3	Catering
4	Cleaning Services
5	Security
6	Engineering Services

extends on Mintzberg's (1997) notion that hospitals are "fragmented organisations where separate worlds exist". Mintzberg (1997) claims that disconnection between different professional functions that are normally associated with FM, leads to efforts that are fragmented. Although these perspectives do not dictate how FM is delineated, it does point towards a function that connects the different spheres of FM.

2.3.2 *Healthcare FM Functions*

Frameworks for categorising healthcare facility management functions have been developed by Barrett (2000), Okoroh et al (2001) as well as Heng (2005).

The model proposed by Barrett (2000) classifies FM functions within a communications framework and is of little use when viewed from an outsourcing perspective. This model is presented in Figure 1.

Okoroh *et al* (2001) however makes a classification along functional areas as depicted in Figure 2. This seems far more appropriate.

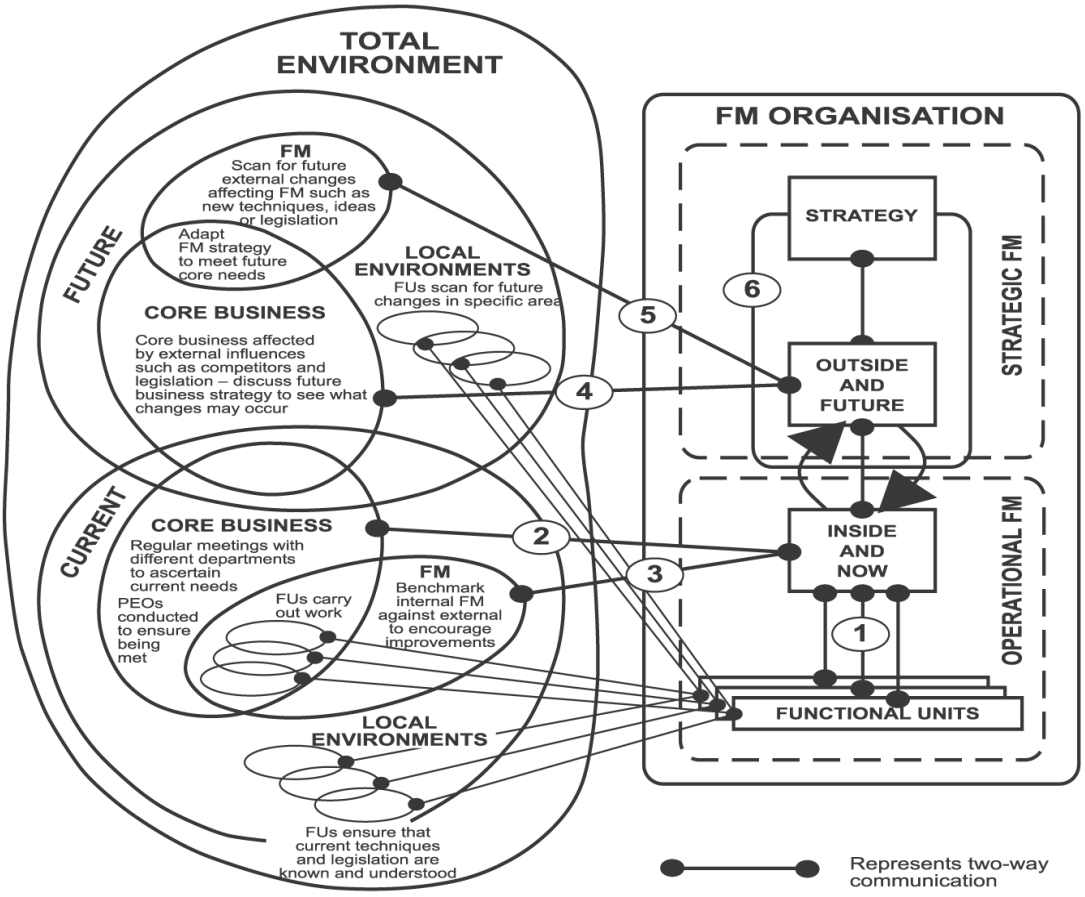


Figure 1: Generic FM model, Barrett (2000)

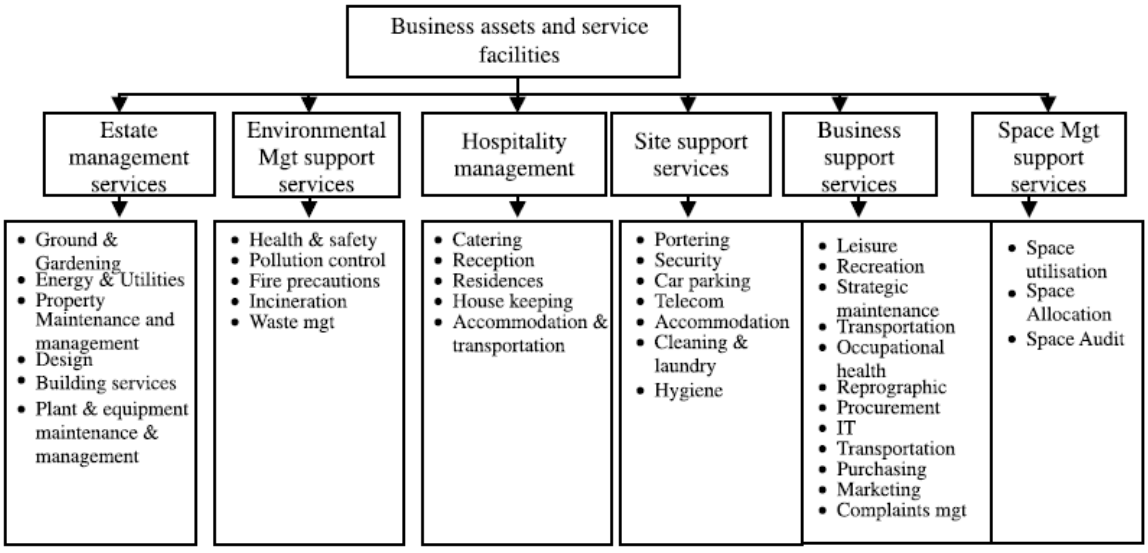


Figure 2: Overview of Business Assets and Service Facilities in the Healthcare Sector, Okoroh *et al* (2001)

Heng (2005) combined these frameworks as well as using a "bootstrapping" technique with industry experts to derive at the FM functions presented in Table 3.

Table 3: Six Core Domains of FM, Shohet and Lavy (2004)

	Service Category	Services
1	Estate Management Services	Maintenance Repairs
		Energy Management
2	Environmental Management Service	Environmental Service
		Fire Safety
3	Hotel Services	Food and Catering Services
		Laundry and Linen Services
4	Site Support Services	Security
		Telecommunication
		Portering
		Accommodation
5	Business Support Services	Transport
		Information Technology
		Purchasing and Supply Service
6	Space Management support services	Facility Planning
		Facility Development
		Space Management

Through inspection, the functions Okoroh and Heng identified has a large degree of similarity. Okoroh's functions were formulated by structures in the National Health Service (NHS) in the United Kingdom. Heng's work is based on structures in the Australian healthcare system.

2.3.3 *Conclusion Pertaining to Sub-Problem 1*

In summary, literature suggests that FM has a distinct value proposition to the business of private healthcare. The domain of FM appears to be very broad and would require various skills to effectively manage it.

However, focus could be lost on highly technical FM functions due to the everyday pressure from "softer" FM functions that traditionally require more operational management input. The skills mix required for managing the hard facilities management services are also very different from the soft services.

2.4 Research Question 2: Decision Parameters and Associated Risk when Outsourcing Facilities Management

In literature on outsourcing in general, Harland and Knight (2005) found in their research limitations that there appears to be very little research that addresses the motivations for outsourcing. The little evidence available of what drives the decision to outsource prompted their research and contains a wealth of general outsourcing parameters, however, their research also points out that previous work only contemplated activities that are either completely contracted in or completely contracted out. Little research contemplates a hybrid model where some functions are contracted out and others not. They put forward that further research may explore circumstances where a mixed model may be appropriate. When exploring such circumstances, appropriate segmentation of the FM function may be key in exploring viability of such a model. This provides a link between the first research question and the second.

2.4.1 *Support for outsourcing in Healthcare*

A correlation was found between high performing companies and outsourcing best practice by Laugen *et al* (2005).

Kremic (2006) cites three reasons why outsourcing may be explored in any business. They could be broadly categorised as being due to cost, strategic and political reasons. These categories were substantiated by Kakabadse and Kakabadse (2000) through previously recognising that the first two of these reasons are usually the drivers in the private sector and the political reason is usually the motivator in public sector.

It is recognised that the domain of outsourcing within healthcare is indeed very broad. Yigit (2007) states that in an era of global competition where new management approaches needs to be sought to gain an edge in the marketplace, hospitals offers “particularly fertile environments” for outsourcing. One reason is due to healthcare facilities’ role to provide a wide array of services, many of which can be bought in. The purpose of their study was to determine the types of services that hospitals in Turkey buy from other

organisations. This included public and private facilities. They found that 72% of maintenance services and 75% of leased medical device services were contracted out. The study sample included 14 university hospitals, 20 Ministry of Health Hospitals, 15 Social Insurance Organization Hospitals and 31 private hospitals in Istanbul, Ankara, Izmir, Antalya, and Eskisehir, which are the biggest cities in Turkey. The study however, does not differentiate outsourcing percentages between private and public facilities. The results of their study suggest that outsourcing, when applied judiciously through cost and risk analysis, is a cost-effective approach that can be used by most hospitals. From this, the notion to research the applicability in the South African private healthcare industry is strengthened.

In an article completely unrelated to healthcare, the business models for outsourcing of Maintenance, Repair and Overhaul (MRO) of airlines are considered by Hamad (2007). Given that the MRO function of an airline is also life critical, it is viewed that the models and discussions could be very relevant to healthcare. In their conclusion, four levels of MRO outsourcing are identified that ranges from fully outsourced to fully in-sourced. It is shown that critical MRO activities such as line maintenance are frequently in-sourced, while activities with low demand at an airline level such as engine maintenance are often outsourced. This may aid in finding an appropriate solution to the fundamental question posed in this research.

Goodsell (2007) developed six principles that should be considered when debating the issue if a service should be outsourced by government or not. The author regards these principles as “illustrative rather than comprehensive”, but they collectively show how public administration has moral, legal, and economic obligations. Although the drivers of outsourcing in government would be different than in a private company, the arguments by Goodsell (2007) could be considered when exploring non-financial variables.

2.4.2 *Prevalence of Outsourcing*

According to Bailey et al (2002), many non-healthcare private companies have outsourced services such as security, maintenance, cleaning and catering. He

further remarks that there is a tendency to outsource these functions under one contract that refers to “Facilities Management”.

In terms of healthcare, the database: Health Source: Nursing/Academic Edition (2006) indicates trends of outsourcing services in the United States. It states that in 2004, the top area in healthcare that is contracted out is housekeeping with 2462 facilities that elected to do so. This increased to 2548 in 2005. Clinical equipment maintenance, being one of the components regarded in South Africa as being part of technical services, has been outsourced in 964 and 1027 facilities respectively to 6 companies. Facility operations are outsourced in 155 and 163 facilities in 2004 and 2005 respectively. Facility maintenance is outsourced to just two companies. In terms of the clinical equipment maintenance, it is my initial perception that much of it is outsourced to the OEM and may have something to do with risk mitigation. The number of facility maintenance companies is surprising and points to it not being particularly popular in the United States. These trends indicate that some FM functions such as catering is mostly contracted out and that functions such as facility operations and equipment maintenance are not.

Moschuris (2007) examines the extent of outsourcing, the decision-making process, the impact of outsourcing, and the future trend of outsourcing in private healthcare organisations in Greece. The research includes the result of a survey conducted amongst Greek hospitals and would be relevant to compare with what is experienced in South Africa.

2.4.3 *Financial Decision Variables to Outsource*

Harland and Knight (2005) states that in general, outsourcing can free up assets and reduce costs in the immediate financial period. This may be the primary two financial drivers for outsourcing in the private healthcare sector and is included in the three financial outsourcing decision variables in Table 4.

Table 4: Financial Benefits of Outsourcing as Defined by Harland and Knight (2005)

	Financial Benefits
1	Reduced costs
2	Short term balance sheet and P&L benefits
3	Benefit through economies of scale

Transaction based economics (TBC) that underpins the outsourcing decision according to Ellram and Billington (2001), dictates that the boundaries of an organisation are determined by the most cost effective option. The notion that hospitals are extremely complex organisations as suggested by Moy (1995) points that this is can not be the only driver.

Other financial drivers include the ability to improve the organisation's flexibility to market conditions as suggested by Greaver (1999). This may be of lesser importance to healthcare in particular as South African demographics, just as in the rest of the world, will create an ever increasing demand for medical services. However, current funding realities in South Africa introduce seasonal fluctuations that may make Greaver's suggestion applicable to South African private healthcare.

Rogers (1999) puts forward that a cash infusion through the transfer of assets from the hospital to the supplier is a relevant financial benefit of outsourcing.

Kremic (2006) proposes some financial advantages. These are very well supported by a literature review as presented in Appendix A. A summary of these advantages are presented in Table 5.

Table 5: Financial Benefits of Outsourcing as Defined by Kremic *et al* (2006)

	Financial Benefits
1	Cost savings
2	Reduced capital expenditures
3	Capital infusion
4	Transfer fixed costs to variable

2.4.4 *Non-Financial Decision Variables to Outsource*

As expected, the literature review of non-financial decision variables yielded much richness. It is concluded by Harland and Knight (2005) that short term cost savings (a fundamental financial driver of outsourcing) can be clearly measurable whereas non-financial drivers are harder to measure. They identified the variables presented in Appendix B. These variables are summarized in Table 6.

Table 6: Non-financial Benefits of Outsourcing as Defined by Harland and Knight (2005)

	Non-Financial Benefits
1	Creates ability to focus on core functions
2	Increased ability to configure resources
3	Increased ability to meet challenging market needs.
4	Ability to access best in class skills and capabilities
5	Freeing of constraints of in-house cultures and attitudes
6	Provision of fresh ideas and objective creativity

Operations strategy offers many other decision variables. Teece (1986) highlights the benefits of partnering with companies that has resource bases similar to the organisation's own. In healthcare, this would relate to medical equipment manufacturers integrating with private healthcare. As healthcare is users of cutting edge technology, this integration could lead to very efficient exploitation of new technology.

Prahalad and Hamel (1990) offer the first non-financial motivator of outsourcing as the ability that is gained to focus on core activities. This conclusion has its roots in operations strategy. In healthcare, outsourcing of non-clinical functions should increase the focus on clinical functions, delivery of which is fundamental to successful healthcare.

Rogers (1999) cites quite a few outsourcing advantages in general, but indicates that a few has specific bearing on healthcare. The first is an acceleration of re-engineering non-core functions. In a non-outsourced facility, re-engineering drives would always compete with investments into patient care. He also puts forward that a specialist company would have access to world-class capabilities as it is their core business. He warns that outsourcing should not be contemplated just because a function is out of control or unmanageable. However, when the reason for outsourcing is understood and the expectations are properly translated to the service provider, significant value can be obtained. Finally, Rogers (1999) claims that the risk of investing in healthcare is high due to frequent changes in e.g. regulations, financial conditions and technology. By outsourcing these functions, these risks can be mitigated on behalf of many clients rather than one healthcare facility.

Kremic *et al* (2006) lists expected non-financial benefits of outsourcing in Appendix A as well as literature support for these benefits. A summary is presented in Table 7.

Table 7: Summary of Non-financial Benefits of Outsourcing as Defined by Kremic *et al* (2006)

	Benefits
1	Quality improvement
2	Increased speed
3	Greater flexibility
4	Access to latest technology/ infrastructure
5	Access to skills and talent
6	Augment staff
7	Increase focus on core functions
8	Get rid of problem functions
9	Copy competitors
10	Reduce political pressures or scrutiny
11	Legal compliance
12	Better accountability/management

2.4.5 *The Risk of Outsourcing*

Work by Lonsdale (1999) and McIvor (2000) suggests that only five percent of companies that was surveyed achieved significant advantage from outsourcing. There appears to be a number of reasons for this. A focus on achieving short term results, a lack of formal outsourcing decision processes, using medium and long term cost advantages as well as increasing the operational complexity of a process all contributed to the low success rate.

Okoroh (2002) in his study of FM outsourcing risks within the British NHS, sites that the risks can have disastrous impact on the business or at least make the delivery of best value to its customers very frustrating.

Kremic *et al* (2006) echoes that companies in general may achieve many advantages due to outsourcing some services, but that the risk, should a service that is outsourced fail, could be high.

It is therefore clear that the identification and weighting of risk is key to the outsourcing decision. The following section will endeavour to extract these risks from literature.

2.4.6 *Identification of risks*

Given the assumption that the scope of private healthcare in South Africa is similar to that provided in the NHS as a public provider, it is intuitive that the risks identified by Okoroh (2002) in NHS facilities would be very similar to those in South Africa however, it is unlikely that the relative importance would be the same due to the difference in business model. This difference in business model is purely based on the notion that the NHS is a public health provider as opposed to being private. This notion is strengthened by the British Department of Health (1997, 1998) that has already proposed that the NHS Trust operated commercially and viably, the very fundamental principles whereby all private healthcare facilities are managed.

In terms of the risk profile for outsourcing services in a hospital, Kane (2007) cites that there are three models for supply chain management – that of a complete outsourcing of all functions except what is regarded as “front room” functions, managing the entire supply chain in house and finally a hybrid of the two. Kane (2007) recognizes that the perceived risk associated with outsourcing technical services as a vital component. It would be appropriate to consider how healthcare facilities abroad manage this.

2.4.7 *Risk Factors*

Historically most outsourcing decisions have been based on financial drivers. The primary financial risk would not only be the failure to realise the financial gain projected by outsourcing but increased financial risk if the outsourcing proves to be more expensive.

In Harland and Knight’s (2005) findings on the risks of general outsourcing, they identified the risks in Table 8:

Table 8: Risk Factors of Outsourcing as Defined by Harland and Knight (2005)

	Non-Financial Risk Factors
1	Lack of skills and competence to manage outsource relationships
2	Increased cost of relationship management
3	Requirement to develop new decision making processes
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage
5	The ability to manage relationships rather than processes
6	Difficulty to in-source later
7	Difficulty to decide how close to core to outsource
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.

Harland and Knight (2005) have also identified risks of outsourcing in general as applicable to organisations, business sectors and countries. These constructs are reproduced in Appendix B. It is apparent from the literature review that Harland and Knight (2005) has done extensive work to understand outsourcing.

Okoroh (2002) identified the risks from studying the FM operational contract at the Derby Royal Infirmary (DRI) between the NHS Trust and a management partnership of two well known FM service provider companies. The document contains best practice experience to establish business excellence. At the time, the Department of Health in the UK regarded the Derby Royal Infirmary as one of the 20 best performing hospitals in the UK. The risk constructs, known as the "DRI Experience", were identified from this contract and is reproduced in Appendix C and summarised in Table 8.

Table 9: Summary of Healthcare Partnership Risk Constructs, Okoroh (2002)

	Risk Construct Category
1	Corporate related risk constructs
2	Legal Related Risk constructs
3	Commercial Related Risk Constructs
4	Financial and Economic Risks
5	Business Transfer Related Risks
6	Facility Transfer Related Risks
7	Customer Care Related Risks

2.4.8 *Weighting of Risk Factors*

Harland and Knight (2000) indicate that those driving outsourcing normally use financial (economic) arguments. Those opposing outsourcing would use non-financial consequences and risks as motivation. Given these opposing arguments, the literature review hints that it is difficult to compare the cost and benefits of the decision.

2.4.9 *Risk and the Outsourcing Decision*

In an article, Guy (2007) reports about ten common myths that could influence the decisions of hospitals in developing clinical service outsourcing arrangements with outsourcing companies in the United States. Inspection reveals that these risks are also very applicable to outsourcing Facilities Management.

These myths, according to Guy (2007) are:

- Myth 1: That cost efficiency is the most important factor when selecting an outsourcing provider. It is suggested that the two biggest risks for a hospital to outsource are that of a risk to profitability and to reliability to offer a service as the ultimate cost can be dramatically affected. It is suggested that when outsourcing is contemplated, it should be

remembered that intangibles are key and that when the contract price is contemplated, that the risks to profitability and liability is also considered.

- Myth 2: That the hospital administrator[1] is the best person to make the outsourcing decision. It is argued that given the high number of functions that may be dependent on the decision, the hospital administrator may be influenced the least by the decision and that if outsourced functions are across functional areas, a multi-disciplinary team should be involved in making the decision. It is suggested that a process for making the decision should be designed and that it should at the very least, include physicians.

- Myth 3: That healthcare outsourcing contracts are not subject to regulatory requirements. It is contemplated that few outsourcing contracts are free from the effect of regulatory risk and especially when it comes to joint-ventures, great care should be taken to structure the outsourcing so that regulatory issues are addressed.

- Myth 4: That a contract can be turned over to the provider as soon as it is signed. It is recognised that most complaints related to outsourcing in healthcare is due to poor implementation. This may be due to a misunderstanding of healthcare procedures by the contractor or even incompatibility between information systems. It is critical that, when outsourcing a function, compatibility issues are openly investigated and that someone should be appointed to internally mange the transition.

- Myth 5: There seems to be the belief that performance parameters are inappropriate and should not be built into outsourcing contracts as the providers are independent contractors. It appears that many hospitals just accept standard contracts drawn up by service providers without ensuring that they contain the performance parameters that would satisfy the hospitals' expectations from said contracts. It is suggested that all

[1] This function is typically referred to as the "Hospital Manager" in South Africa

performance parameters that would satisfy a hospital's expectations should be written into the contract.

- Myth 6: That a hospital is safe in terms of medical-legal issues as long as the outsourcing contractor has adequate insurance. It is recognised that the South African legal system is somewhat different from the United States and that in many cases a healthcare facility can not delegate responsibility to a third party. It is suggested that details of insurance coverage is included in the outsourcing contract and that certification of agreed levels of insurance is provided. It should be recognised that any legal claim against the healthcare facility may entail a substantial secondary legal process.

- Myth 7: That termination of an outsourcing contract is a simple process if the provider performs poorly. It is argued that outsourcing contracts should be very specific in their allowance for causal and non-causal termination as termination based on "cause" could be very difficult to prove.

- Myth 8: That it is easy to appoint a new service provider or initiate the outsourced function in-house. It is cited that a healthcare facility could face having to fulfill contractual obligations to the original and new service provider while legal issues are being investigated. It is suggested that a contingency plan is kept current at all times of having outsourced functions to mitigate risks associated with non-performance.

- Myth 9: That is not important to track a previous service provider's financial performance. Legal matters may arise many years after an outsourcing contract was terminated and it is suggested that these risks need to be mitigated.

- Myth 10: That a healthcare facility has few options to recover from an outsourced service provider that closes its doors. It is suggested that a healthcare facility lodge claims for outstanding services as soon as

possible however, the risk of failure to deliver a medical service should be paramount in the institution's recourse.

In conclusion, Guy (2007) warns that the risks posed through the abovementioned "myths" should not deter healthcare facilities to explore outsourcing opportunities. In general, it should be noted that outsourcing of clinical services, as mentioned frequently in the article, would not be applicable to South Africa as legislation prohibits this. This could however be useful as a test when selecting outsourcing decision parameters for South Africa.

2.4.10 *The Process of Outsourcing*

Kremic et al (2006) have developed a simple but formalised process to aid in the outsourcing decision. The process dictates that the risks should be weighed up against the benefits when contemplating if a function should be outsourced. Only once it is perceived that the benefits outweigh the risks, would the functions be inspected for outsourcing.

This process is presented in Figure 3.for completeness and could be used to guide the decision making process.

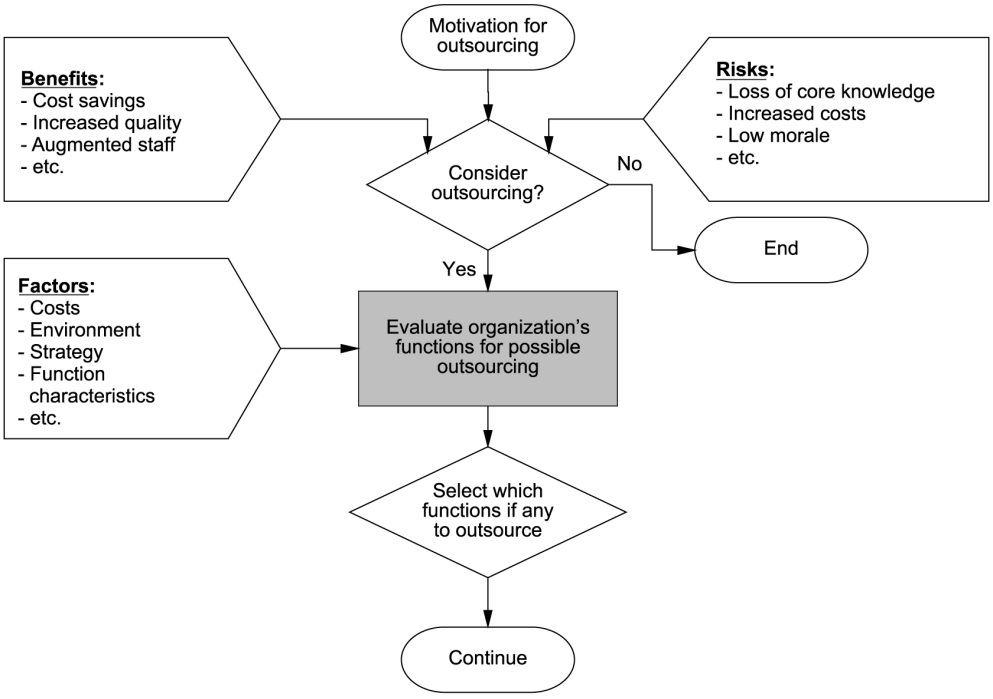


Figure 3: Outsourcing Decision Framework, Kremic *et al* (2006)

2.4.11 *Conclusion Pertaining to Sub-Problem 2*

In summary, literature suggests that there are numerous decision variables when contemplating outsourcing of FM.

The financial variables that have been identified through the literature review is summarised in Table 10. Seven fundamental financial drivers of outsourcing have been identified.

Table 10: Healthcare Financial Outsourcing Variables

	Financial Outsourcing Variables	Proposed by
1	Reduced costs	Harland and Knight (2005), Kremic *et al* (2006)
2	Short term balance sheet and P&L benefits	Harland and Knight (2005), Kremic *et al* (2006)
3	Cash Infusion if assets are sold	Rogers (1999)
4	Benefit through economies of scale	Harland and Knight (2005)
5	Flexibility	Greaver (1999)
6	Transfer fixed costs to variable	Kremic (2006)
7	Decision driven by minimal cost boundary	Ellram and Billington (2001)

The non-financial variables that have been identified through the literature review is summarised in Table 11.

Table 11: Healthcare Non-financial Outsourcing Variables

	Non-Financial Benefits	Proposed by
1	Creates ability to focus on core functions	Harland and Knight (2005), Prahalad and Hamel (1990), Kremic *et al* (2006)
2	Increased ability to configure resources	Harland and Knight (2005), Rogers (1999)
3	Increased ability to meet challenging market needs	Harland and Knight (2005)
4	Ability to access best in class skills and capabilities	Harland and Knight (2005), Rogers (1999), Kremic *et al* (2006)
5	Freeing constraints of in-house cultures and attitudes	Harland and Knight (2005)
6	Provision of fresh ideas and objective creativity	Harland and Knight (2005)
7	Accelerate re-engineering benefits	Rogers (1999)

	Non-Financial Benefits	Proposed by
8	Quality improvement	Kremic *et al* (2006)
9	Increased speed	Kremic *et al* (2006)
10	Greater flexibility	Kremic *et al* (2006)
11	Access to latest technology/ infrastructure	Kremic *et al* (2006)
12	Augment staff	Kremic *et al* (2006)
13	Get rid of problem functions	Kremic *et al* (2006)
14	Copy competitors	Kremic *et al* (2006)
15	Reduce political pressures or scrutiny	Kremic *et al* (2006)
16	Legal compliance	Kremic *et al* (2006)
17	Better accountability/management	Kremic *et al* (2006)
18	More efficient exploitation of cutting edge healthcare technology	Teece (1986)

Guy (2007) claims that non-financial outsourcing variables are more significant than financial.

It is strongly suggested that many outsourcing decisions are made on financial grounds but that non-financial variables can have a far greater impact on its success. Literature also suggests that there are significant risks associated with the outsourcing of FM functions however; the outsourcing decision could be simplified by grouping functional areas according to risk.

The literature review also provided outsourcing risk variables, summarised in Table 12.

Table 12: Outsourcing Risk Variables

	Risk Variables	Proposed by
1	Lack of skills and competence to manage outsource relationships	Harland and Knight (2005)
2	Increased cost of relationship management	Harland and Knight (2005)
3	Requirement to develop new decision making processes	Harland and Knight (2005)
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	Harland and Knight (2005)
5	The ability to manage relationships rather than processes	Harland and Knight (2005)
6	Difficulty to in-source later	Harland and Knight (2005)
7	Difficulty to decide how close to core to outsource	Harland and Knight (2005)
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company	Harland and Knight (2005)

2.5 Overall Conclusion of Literature Review

Literature suggests that outsourcing in Facilities Management can add value to Healthcare however, failure to recognise the effect that specialist functions have on the business, has traditionally clouded the outsourcing decision. The notion of an integrated approach to FM in South Africa needs to be investigated.

Literature further suggests that the non-financial variables of outsourcing can be significant drivers of the outsourcing decision, yet it is evident that historically the decision may have been based on financial drivers only. Literature also suggests that the risk associated with outsourcing non-core functions as a singular management function is largely due to the complexity contained in the function.

2.6 Propositions

The following propositions are therefore made:

2.6.1 *Proposition 1:*

That Facilities Management, managed typically as a singular management function in other industries, should not be managed as an integrated function in the South African Private Healthcare environment due to the specialist and diverse nature of some of its services.

2.6.2 *Proposition 2:*

Non-financial drivers of the outsourcing decision are more significant than financial drivers in the decision to outsource FM functions and that the total risk of outsourcing FM can be mitigated by employing separate outsourcing strategies for the different FM functions in private healthcare in South Africa.

2 CHAPTER 3: RESEARCH METHODOLOGY

Following from the literature review, it is clear that the two propositions would require the same research methodologies. The both propositions would be best explored through a qualitative exploratory research methodology. This methodology will be discussed in more detail as well as its appropriateness to this research.

3.1 Qualitative Research Paradigm

The intent of this research is to probe current thinking of healthcare executives that are engaged in Facilities Management.

It was found that a qualitative research paradigm would best direct the research. Babbie (2001) uses the term “qualitative research paradigm” to describe the research approach that departs from understanding the “insider perspective”. The methodologies associated with this paradigm leans itself to extracting such perspectives and in the absence of literature directly relating to the area of research, it is seen as a fundamental objective to enable comparisons with other countries to be made.

To ensure that the most applicable paradigm for this research has indeed been selected, aspects of the chosen paradigm were tested against parameters suggested by Babbie (2001). These “tests”, as related to this research, are as follow:

- With no formal literature relating directly to the subject available, the research was conducted in a “natural setting of social actors” through structured interviews.
- The research explores “the actor’s perspective”, the actors in this research being healthcare executives that are engaged in Facilities Management.

- The primary objective of this research was indeed the “in-depth descriptions and understanding of actions and events”.

- Although Babbie (2001) suggests that qualitative research has the main concern of “understanding social action in terms of its specific context rather than attempting to generalise to some theoretical population”, it is clear that an understanding of social perception was sought in the healthcare context.

- To extract perceptions that reside with healthcare executives, the qualitative researcher was indeed the “main instrument in the research process” through the structured interview process.

These criteria strengthened the notion that qualitative research was a suitable paradigm in which to conduct this research.

3.2 Exploratory Research Design

In the absence of formal research on outsourcing Facilities Management in South African Private Healthcare, this research lends itself to an exploratory research methodology. Selltiz (1965), as quoted by Babbie (2001) suggests that explorative research would be done for the following reasons:

- To review related social science and other pertinent literature.

- To survey persons who has practical experience of the issue at hand.

- To analyse “insight-stimulating” examples.

In terms of this research, related and other pertinent literature is reviewed and is compared with insight provided by people who has practical experience of the issue at hand. This provides compelling justification for the explorative nature of the research.

From the literature review, it appears that much research has been published on FM structures abroad however, the structure and applicability to the South African environment has not been considered. The research problem is

addressed through exploring the implementation of the different FM models as suggested in the literature review in the significant healthcare groups. A structured interview was done with significant role-players in the industry. This research methodology is also supported by Harland and Knight (2005) where general outsourcing was explored.

With regard to the decision parameters and risk to outsourcing, an exploratory qualitative approach was also followed. It was initially contemplated that very few non-financial parameters are taken into account when an outsourcing decision is taken, therefore extracting current best practice from the South African environment would yield very little insight. This was substantiated by a gap in literature on the subject. The general risk constructs was therefore collated from the literature review. As these identified risks had not been tested in the South African environment, the structured interview enabled current general outsourcing trends to be contemplated. Due to the lack of literature, a qualitative methodology would not be appropriate as the validity to local business would not have been established.

3.3 Population and sample

3.3.1 Population

In pursuit of finding a FM model suitable for the South African private healthcare environment, the population consisted of all private healthcare facilities in South Africa that currently has components of a FM function. Given that the domain of FM is not clearly defined in South Africa (hence being included in this research), these functions may be managed as separate entities in the different groups. It was foreseen that only facilities that are part of a larger hospital group would have contemplated the need a functional FM entity but due to a possible lack of understanding its complexities, may not have implemented it as a single functional area. This was substantiated by Harland and Knight (2005) in their conclusion of general outsourcing trends. This hampered the identification of the population. With these restrictions, it was foreseen that the population would

be not be more than department heads of the large hospital groups. This would represent more than 90% of private healthcare in South Africa.

In pursuit of identifying all the risks associated with outsourcing, a qualitative study by Harland and Knight (2005) was used as basis. Harland and Knight (2005) identified many outsourcing risks and were used as an initial set of constructs during a structured interview. It was found that each private healthcare group, with the exception of the Clinix Group, had at least one person engaged in some form of FM.

3.3.2 Sample and sampling method

Due to the small population, the sample represented more than 90% of the population. The sample represents experts in the private healthcare industry with collectively having more than 50 years of experience in this particular industry. The list of respondents is presented in Table 13.

Table 13: List of Primary Respondents

Respondent	Group: Position
Mr Charlie de Wet	Netcare: Regional Technical Manager
Mr Vincent MacQueen	Community Health: Former Group Facilities Manager
Mr William Osburn	Clinix Holdings: Hospital General Manager
Mr Kevin Poggenpoel	Medi-Clinic: National Technical Manager
Mr Maartin Zimmermann	Life Heathcare, National Technical Manager

3.3.3 Bias

The person conducting this research is currently appointed as the Group Technical Manager of Netcare, the largest private healthcare group in South Africa at the time of the study. Given the small population and a possible biased result, a Regional Technical Manager was interviewed. The candidate had previously operated at a director level responsible for facilities management and would yield responses at a similar level to the other members of this sample.

3.4 The Research Instrument

The research was conducted through a structured interview process.

The interview was structured around the two research questions and made up the first level of the interview structure. The second level was designed to lead the interview to specific aspects of outsourcing as identified in the literature review. These interview questions either led to direct outcomes or two fundamentally different opinions. These possibilities were mapped on a flow diagram and led to questions that would explore that specific realm. Once this third level wass reached, the interview would become explorative. The flow diagram is presented in Appendix D.

Based on the interview flow diagram, a questionnaire sheet was prepared to ensure that questions would be asked consistently. The questionnaire sheet is presented in Appendix E. This would be used in conjunction with the interview flow diagram to ensure the integrity of the first and second level interview structure.

The initial constructs for the risk of outsourcing was as identified in the literature review. Respondents were asked to rank these constructs in order of importance merely to ascertain the relative importance of financial versus non-financial risks. It was found that the constructs would be applicable to the South African Private Healthcare industry.

3.5 Procedure for Data Collection

A structured interview was designed. It consisted of two parts; the first exploring functional areas within FM. Theory highlighted in the literature review was used to explore functional delineation of FM functions. Conclusions will be based on the structure of each respondent's organisation as it would represent thinking at the time of doing this research. The theory was therefore tested against current practice in South African private healthcare.

The second part explored each respondent's view of the outsourcing decision drivers and risks based on the insight gained primarily from constructs by

Okoroh (2002), Harland and Knight (2005) as well as Kremic *et al* (2006). These constructs was used as basis to extract relevant benefits/drivers of outsourcing. After the benefits were collated, other literature that cited outsourcing benefits were used to test the completeness of the listing. It was correctly anticipated that there would not be significant other contributions as the works of the above authors were well researched and appears robust. The structured interview was designed in such a way that risks applicable only to South African private healthcare could be identified and could then be ranked and weighted with the known drivers and risks. With regard to outsourcing decision and risk parameters, any additional drivers and risks that were identified during the interviews were collated. As these drivers and risks were identified during some of the interviews, a list was constructed after all the interviews had been conducted. These were listed in alphabetical order with those already identified from the literary review. The respondents were requested to select and then rank applicable parameters.

Each of the primary respondents listed in Table 13 was contacted and a meeting set up. Due to the complexity of the structured interview and possible skewness created by inconsistent preparation, the document was not distributed to the respondents prior to the interview. The respondents are mostly based in Gauteng, South Africa except for two respondents who were based in the Western Cape region. This would limit the number of possible meetings to one per person.

3.6 Data Analysis and Interpretation

When discussing an optimal FM structure, it was anticipated that the three large groups would have differences in structures and that this could be used as a starting point. The structured interview would attempt to find consistent delineation between FM functions as well as to understand the reason for each organisational structure. This would be compared to theoretical structures. The outcomes would be summarised in the form of minutes. Very little analysis was foreseen as the process of a structured interview would enable an

understanding of each group's structure. Consistencies between the groups could be extracted and a proposition made of best practice.

The ranked financial and non-financial parameters would be analysed consistently. The outcome will determine if financial or non-financial parameters are perceived to be more significant when reaching an outsourcing decision.

An analysis of the risks of outsourcing would be collated with the functional areas within FM to determine which functions could be successfully outsourced. An interpretation would be made if FM could be outsourced as an entity or if only some parts should be contracted out as literature suggests.

3.7 Limitations of the Study

The study has the following limitations:

- Sampling: Although the sample is for all practical purposes equal to the population, the relative small size of the population may skew conclusions reached. One respondent could significantly influence the outcome.

- As the research is explorative by design, the conclusions reached in this research could be influenced by the respondents' unwillingness to share perceptions given the competitive environment within the private healthcare sector.

3.8 Validity and Reliability

Neuendorf (2002) defines validity in general as "the extent to which a measuring procedure represents the intended, and only the intended, concept".

From theory on the subject of validity in qualitative research it is apparent that it differs substantially from the role it plays in quantitative work. Validity in qualitative research, according to Creswell (2001), "is used to suggest determining whether the findings are accurate from the standpoint of the researcher, the participant or the readers of an account." As this type of

research can not be supported by the rigorous application of numerical techniques to justify findings, different strategies are employed to justify validity. Literature generally suggests that in the absence of a technique to ensure validity, techniques that mitigate validity risks should be employed.

Creswell (2001) suggests strategies to mitigate risks that could undermine the validity of this type of research. These strategies are:

- That information obtained from different data sources should be *triangulated*.
- The findings of the research should be made available to respondents for *member-checking* so that the interpretation of information can be verified.
- The findings should be conveyed as a *rich and thick* description so that the nuances of the setting can be conveyed to the readers.
- That the researcher should be able to *clarify the bias* that was brought into the research.
- That all perspectives, both *negative* and *positive*, should be presented.
- That the researcher should spend an *extended time* in the field so that an in-depth understanding of the field can be obtained.
- Using a mechanism of *peer-debriefing* to ensure that the accounts have been accurately interpreted.
- The use of an *external auditor* to oversee the research.

Some of these constructs were used to mitigate possible validity threats.

3.8.1 Internal Validity

Creswell (2005) describes internal validity as the ability to draw a correct conclusion from a study by using or relating a respondent's personal experience to make such conclusions. As suggested above, the internal validity can be improved by mitigating the validity threats through the following ways:

- Triangulation of responses: The responses from the respondents were mapped on a matrix of possibilities as was extracted from the literature review. Responses not anticipated, were noted separately and also triangulated with the responses from other respondents.

- Member-checking: The findings of this research were made available to all the respondents for comment to ensure that all views were interpreted correctly.

- Descriptions: The structured interviews were recorded immediately after the interview to ensure that no richness of content would be lost.

- Clarify Bias: This has been identified in section 3.3.3. It was conceded that the interviewer's position at the time of conducting the interviews would have an effect on the respondents as all had previously engaged with one another as part of interaction through professional organisations and normal business. This risk was mitigated through setting up the first three levels of the structured interview, thereby directing the flow of the interview appropriately. Mapping of responses on a predetermined matrix would also reduce bias opinions however; it was conceded that the unstructured parts of the interviews could be affected by bias.

- Positive and Negative responses: It was anticipated that responses could not have been interpreted as positive or negative as the respondents were not asked to take a position but to merely state their current perspective.

- Extended time to understand the issue: The interviewer has been engaged in the industry specific to this research for more than 10 years, thereby having an intimate knowledge of the nuances in the private healthcare sector. Although it would raise questions of biasness as identified previously, it had the advantage of intimately understanding the industry. It also aided in interpreting feedback provided by the respondents as very little room was left for misinterpretation of perceptions.

- Peer-debriefing: This mechanism could not be used as all identified role-players were engaged in the interview process.

- External Auditor: The research supervisor acted as the external auditor and provided guidance with the structured part of the interview.

Given above intervention to mitigate potential validity threats, the internal validity is deemed robust given the research paradigm and design.

3.8.2 External Validity

Creswell (2001) describes external validity as using conclusions drawn from the study to incite an understanding or to offer a recommendation of past or future situations. It is fundamental that it should be recognised that this research would only be applicable within the delimitations set in 1.7.1.

As the respondent sample represents more than 90% of the population within the set delimitations, conclusions drawn would be representative of the private healthcare industry in South Africa. It is foreseen however, that legislation with regards to the business of private healthcare may change in future and that conclusions drawn in this research may no longer be applicable after such changes have come into effect.

3.8.3 Reliability

Reliability is defined by Bell (2005) as “the extent to which a test or procedure produces similar results under constant conditions an all occasions”. Although it is intuitive that reliability is fundamental in quantitative research, Creswell (2001) cites that, in contrast with quantitative research, reliability as well as generalisation would play a lesser role in qualitative research. Bell (2005) suggests that reliability is checked as part of the wording of the research instrument, the instrument in this research being the structured interview.

Reliability in this research was influenced by the selection of respondents as well as the design of the structured interview. Respondents were selected based on their position in their respective organisations. All respondents had

been at the highest level of Facilities Management at some time in their career and had been engaged in the field for many years, thereby making them industry experts. Risks in terms of understanding basic technical terms were therefore well mitigated. Table 13 also indicated the respondent mix. A high degree of structuring in the first three levels of the structured interview also increased the reliability that the interview process would yield.

It was foreseen that the expertise of the respondents may be different due to the inconsistent way Facilities Management is structured in South Africa however, the interviewer has an in depth knowledge of the respondents due to relationships with them It is therefore foreseen that reliability will be adequate to reach a credible conclusion.

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

The structured interview, as published in Appendix D, was used to probe current thinking in the Private Healthcare sector in South Africa in a consistent and organised manner. This chapter provides a presentation of the views and perceptions identified during interviews with industry experts. A discussion of the results follows after each section, organised as questions. Given the structured design of the questionnaire, each section will lead onto the next and will conclude by directly leading into one of the two propositions made.

4.2 Demographic Profile of Respondents

To probe executive thinking, five persons were interviewed. Three of the five, being Messrs. Poggenpoel, Zimmermann and de Wet represented 87% of the private healthcare market in terms of number of beds at the time of the interviews. The number of facilities under the Respondents' control is as follows.

Table 14: Relative Number of Facilities under Control of Respondents

Healthcare Group	Number of hospitals
Netcare Limited (Charlie de Wet)	54
Life Healthcare (Maartin Zimmermann)	62
Medi-Clinic Limited (Kevin Poggenpoel)	46
Community Healthcare (Vincent MacQueen)	5
Clinix Group (William Osburn)	5

A brief demographic profile of each person interviewed will now be presented:

4.2.1 Mr Vincent MacQueen

Mr MacQueen was interviewed on Thursday 10 July 2008 between 13h00 and 15h00 at the offices of Netcare Limited in Sandton.

Mr MacQueen was the Group Facilities Manager responsible for managing the facilities of the Community Healthcare Group between 1993 and 1997. The Group managed 5 facilities, primarily situated in Gauteng, South Africa. These include the Montana, Bougainville and N17 Private Hospitals in Gauteng and the Kuilsriver and UCT Private Hospitals in Cape Town. He held this position for four years until the Group was acquired by Netcare Limited in 2007.

Mr MacQueen established the facilities management function for the group when it was formed. He assumed responsibility for all facility related functions for the group and was in a position to make executive decisions relating to this function.

The interview was done based on the perceptions and management information available to Mr MacQueen during his time at Community Health.

4.2.2 Mr Charlie de Wet

Mr Charlie de Wet was interviewed on Friday 25 July 2008 between 13h00 and 15h00 in Cape Town.

Mr de Wet was employed as the Regional Technical Manager: Coastal Region at Netcare Limited at the time of the interview however, he entered the realm of healthcare facilities management in 1993 with his appointment as Director of Development with the Hospiplan Group. When the Hospiplan Group was sold to the Medi-Clinic Group, he was appointed Project Manager for 3 years where he was primarily responsible for healthcare facility expansion.

In 2001, he was appointed as Managing Director of Spectramedic, a medical equipment supply company. He was responsible for all aspects of the business.

In 2005 he joined Netcare in the position he held during the time of the interview, a position that he had been holding for 3 years at the time of the interview.

The interview was conducted on the basis of Mr de Wet holding a regional position primarily responsible for FM functions and that the National Manager of this Group was engaged as the researcher.

4.2.3 Mr Maartin Zimmermann

Mr Zimmermann was interviewed on Friday 18 July 2008 at 15h00 at the offices of Life Healthcare, Illovo, Johannesburg.

Mr Zimmermann is the Group Engineering Manager of Life Healthcare Group, the second largest private healthcare group in South Africa. Mr Zimmermann was employed by Eskom, the electricity producer of South Africa before being appointed as the Group Facilities Manager at Life. At the time of conducting the interview, he had been with the group for 5 years. He had held the position of Group Engineering Manager for the preceding 2½ years.

Mr Zimmermann assumed responsibility for all Facilities Management functions when he was appointed and was instrumental in shaping the organisational structure with regards to this function.

4.2.4 Mr Kevin Poggenpoel

Mr Poggenpoel was interviewed on Monday 21 July 2008 between 17h00 and 19h00 at the offices of Netcare Limited, Sandton.

Mr Poggenpoel was the Manager: Engineering Services at the Medi-Clinic Group, a position he held for 6 months at the time of the interview. Medi Clinic was the third largest private healthcare grouping in South Africa at the time of the interview. He started a career in private healthcare as the Technical Manager at the Mitchells Plain Medical Centre in 1990, a position he held for more than a year. He further managed at a regional level for a further 14 years before being appointed into the position he held at the time of the interview.

Mr Poggenpoel has managed most Facilities Management functions at some time in his career at Medi-Clinic.

4.2.5 Mr William Osburn

Mr Osburn was interviewed on Saturday 2 August 2008 at 10h30 in Johannesburg.

Mr Osburn has had 20 years experience as a Hospital General Manager at the time of the interview. His entry into Private Healthcare was through appointment as Hospital General Manager at the Chiluvane Hospital, a 200-bed facility that was part of the Lifecare Special Healthcare Services Group at the time. After 10 years in this position, he joined the Clinix Group where he was engaged for 4 years as Hospital Manager.

Mr Osburn joined the Netcare Group as Hospital Manager of the Mulbarton Hospital in Johannesburg. He later held this position at the Netcare Garden City Hospital before accepting the position as Hospital Manager of the Clinix Sebokeng Hospital, a position he had held for a year at the time of the interview.

4.3 Results and Discussion pertaining to Proposition 1

The responses from the interviews relating to proposition 1 are now provided. In some instances, the respondents name was abbreviated in the following way.

Table 15: Respondents Name Abbreviation

Respondents	Abbreviation
Charlie de Wet	CW
Maartin Zimmermann	MZ
Kevin Poggenpoel	KP
Vincent MacQueen	VQ
William Osburn	WO

With reference to the structured interview published in Appendix E, responses by question from the five respondents as well as a discussion on each are now presented:

4.3.1 Results of Question 1

Question 1 confirmed that the respondents were indeed engaged in Facilities Management. The specific question asked was:

"Are you familiar with the term Facilities Management?"

A response of "Yes" confirmed that the person perceived him/herself as being familiar with the term, "no" indicated that the person was not familiar with the term or did not have any background in this function. It is assumed that the person would have an understanding of the term "Facilities Management" as it is used in general excepted colloquial language.

The responses of all the respondents are presented in Table 16.

Table 16: Responses to Question 1

Respondents	Response
Charlie de Wet	Yes
Maartin Zimmermann	Yes
Kevin Poggenpoel	Yes
Vincent MacQueen	Yes
William Osburn	Yes

From the responses received, all respondents acknowledged that they are familiar with the term Facilities Management. As the context of the term was explained during the interview opening, the respondents by implication indicated that they were all engaged in aspects of Facility Management in Private Healthcare Facilities in South Africa and as is relevant to this research.

4.3.2 Discussion Relating to Question 1

The question of appropriate sampling raised in Section 3.3.2 was tested with the first question. Given that all respondents indicated that they were indeed occupied in Private Healthcare Facilities Management, the credibility of the responses was deemed to be very high and would yield appropriate responses.

4.3.3 Results of Question 2

Question two confirmed the respondents' understanding of what functions are related to Facilities Management. The specific question that was asked is:

> "What functions, in your experience, makes up that of Facilities Management in your organisation?"

Each respondent was asked to indicate on the interview sheet what functions he regarded as being related to Facilities Management. By indicating "yes", the candidate acknowledged that in his experience, the particular service category makes out part of the Facilities Management function. By indicating "no", the candidate indicated that he does not regard the service as forming part of Facilities Management. The consolidated responses from all the respondents are reproduced in Table 17.

Table 17: Responses to Question 2

Service Category	CW	KP	MZ	VQ	WO	# Yes
Maintenance Repairs	Yes	Yes	Yes	Yes	Yes	5
Energy Management	Yes	Yes	Yes	Yes	Yes	5
Environmental Service	Yes	No	Yes	Yes	Yes	4
Fire Safety	Yes	Yes	Yes	Yes	Yes	5
Food and Catering Services	Yes	Yes	No	Yes	Yes	4
Laundry and Linen Services	Yes	Yes	No	Yes	Yes	4
Security	No	Yes	No	Yes	Yes	3
Telecommunication	Yes	Yes	Yes	Yes	No	4
Portering	No	No	No	No	No	0
Accommodation	No	Yes	Yes	No	No	2
Transport	No	No	Yes	No	Yes	2
Information Technology	No	No	No	No	No	0
Purchasing and Supply Service	No	No	No	Yes	No	1

Service Category	CW	KP	MZ	VQ	WO	# Yes
Facility Planning	Yes	Yes	Yes	Yes	Yes	5
Facility Development	Yes	Yes	No	Yes	No	3
Space Management	Yes	Yes	No	Yes	No	3

Mr Poggenpoel added the function of “Resource Management” and Mr Zimmermann the function of “Business Efficiency“ to the list.

In terms of frequency, 4 of the 16 functions were indicated by all respondents to be part of what they perceive Facilities Management to be and 2 were consistently rejected as forming part of Facilities Management. It was found that 11 of the 16 functions were nominated by the majority of the respondents as being part of Facilities Management.

4.3.4 Discussion Relating to Question 2

Functions that were consistently rejected as forming part of FM functions in South African Healthcare was that of Portering and Information Technology (not selected by any Respondents), Purchasing and Supply (selected once) as well as Accommodation and Transport (selected twice). Most of these functions were seen as pure administration functions except Information Technology that requires a very specialised set of expertise and is managed separately.

It has become clear from the discussions that the above functions are not regarded as being part of the Facilities Management functions and differentiates the way South African Private Healthcare is managed to that from abroad.

This separation of some functions will impact the way FM functions will be grouped with the view of making an outsourcing decision. This may render the processes of how Facilities Management is outsourced elsewhere not applicable to South Africa.

4.3.5 Results of Question 3

Question 3 explored whether there was a perceived difference between Private Healthcare Facilities Management and the same function in other industries. As the literature review highlighted in related industries, this question would indicate the relevance that literature relating to Facilities Management of other industries would have on private healthcare. The specific question that was asked is:

> "Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?"

A "yes" response indicates that the Respondents perceived there to be a difference between private healthcare Facilities Management and other industries such as the hospitality industry. Responses are tabled in table 18.

Table 18: Responses to Question 3

Respondents	Response
Charlie de Wet	No
Maartin Zimmermann	Yes
Kevin Poggenpoel	Yes
Vincent MacQueen	Yes
William Osburn	Yes

From Table 18, four out of the five respondents (80%) indicated that they perceived there to be a difference between Facility Management in Private Healthcare to other industries.

Respondents that indicated that they perceived there to be a difference, were requested to disclose their perceived differences. The responses were very similar with all consistently indicating that some healthcare FM functions are engaged in life support systems, something that is not often encountered in other industries.

Details of the perceived differences cited by the respondents are published in Table 19:

Table 19: Perceived FM Differences to Other Industries

Difference	Contributed by
The fundamental functions are very similar to the hospitality industry, but with an additional highly technical component not normally associated with that industry.	Vincent MacQueen
Private healthcare also differs with public healthcare in South Africa due to management structures. Hard Facilities management is usually managed by the Public Works Department and Soft services are deemed operational and are managed directly from the hospital as part of operations.	Vincent MacQueen
Facility management in Private Healthcare is more focused due to higher level of skills engaged. There is an apparent skills shortage in the public sector and it has a direct result in an uncoordinated facilities management structure.	Vincent MacQueen
The major difference is in the priority of the different functions. In the hospitality industry, that closely resembles the healthcare facility industry, little differentiation is made between the importances of the components of FM functions. In healthcare, it should be recognised that some FM functions relates to life support. One can not afford to be “lacking” in these areas as it directly influences human life. Back-up systems are very important for instance. Aesthetics may in some instances not be as important as functionality of life support functions.	Maartin Zimmermann
Medical-legal perspective very different. In hospitals, one has clients that are already sick, the hospitality industry usually gets healthy clients. This has a profound influence on the client’s journey through the facility and requires a slightly different approach to Facility Management.	Maartin Zimmermann
The ability to resolve problems encountered in Facility Management are not easy as the results can be very complex. In healthcare facilities, many systems are interlinked and intervention can have multiple effects.	Maartin Zimmermann
The major difference is that healthcare Facilities Management includes life critical functions. Other industries such as hospitality may not have systems that support life.	Kevin Poggenpoel
Due to above, the required urgency may not be the same as is required in other industries.	Kevin Poggenpoel

Difference	Contributed by
In the leisure industry, the focus on Facilities Management functions is more on aesthetics (look and feel). In private healthcare, it is about look, feel as well as the critical nature of the systems.	Kevin Poggenpoel
Given the complexity of systems, a different skill set is needed to manage the FM function. Technical skill as well as passion is required. Many people that have engaged in private healthcare facilities functions have failed due to a lack of this passion.	Kevin Poggenpoel
The above answer was substantiated by explaining that the services are the same – hospital and hotel air-conditioning is essentially the same. However, the details are very different. The impact of certain FM functions failing in a hospital is far bigger; hence its relevant importance to the business is far greater.	Charlie de Wet
Facilities Management was deemed to be more complex in the healthcare environment. A more hands-on approach is required as some functions are supporting life.	William Osburn
A link between some functions was also raised, i.e. clinical equipment and plant maintenance.	William Osburn

4.3.6 Discussion Relating to Question 3

Response convergence was very strong. When the single “no” response was explored, the person indicated that the type of services were very similar but conceded that the impact of certain of these functions is far greater in a hospital. This view was consistently held by all respondents.

In summary, all respondents indicated that due to the life critical functions performed by some of the FM functions, the domain of Facilities management can not be viewed as a singular function.

This notion supports the first proposition.

4.3.7 Results of Question 4

Question 4 explored the organisational structure in terms of reporting and functional flows. Each respondent was asked to provide an organisational chart of how FM functions were managed. An indication of the functions that were

outsourced at the time of the interview was also requested, indicated by functions that are shaded in the organogram. The different organisational charts are published in Figures 4 through 8: In each organogram, a solid reporting line would indicate direct line reporting and a dashed line would represent indirect line reporting.

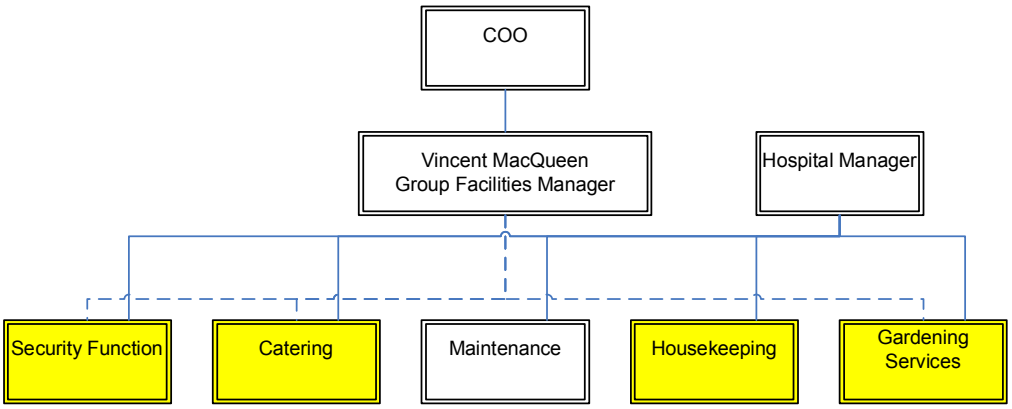


Figure 4: FM Organisational Chart of the Community Health Group

The Community Health Group managed to outsource functions from hospital level whereby in-house functions such as Maintenance were managed by a single person at Group Level. The structure of how Life Healthcare manages the FM function is presented in Figure 4

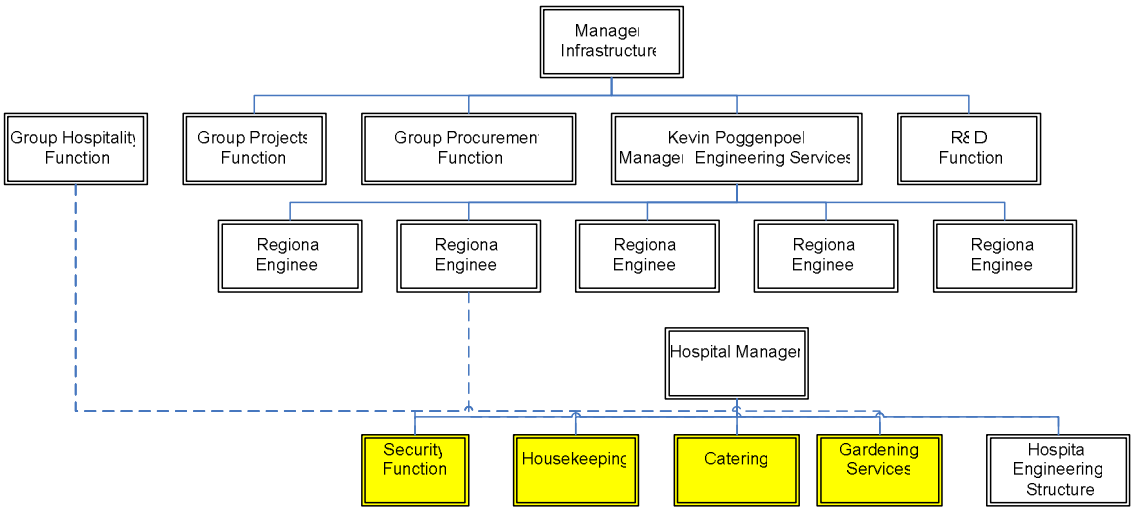


Figure 5: FM Organisational Chart of the Medi-Clinic Group

Medi-Clinic reported an organisational structure aligned with functions that were in-house and outsourced. Outsourced functions were managed by a Group

Hospitality Function. In-house functions were managed in an Infrastructure Division that was dominated by Engineering Services managed by a Group Engineering Manager. The structure is presented in Figure 5

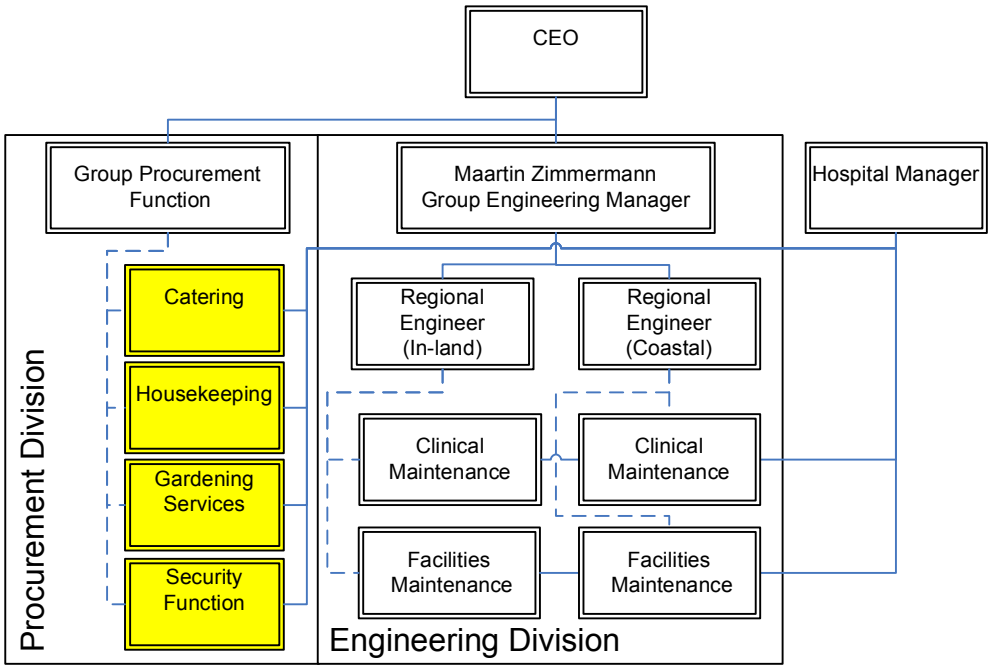


Figure 6: FM Organisational Chart of the Life Group

Life Healthcare regarded all outsourced functions as commodities and managed them through a Procurement function. An Engineering function manages all hard FM functions. The organisational design of Facilities Management is presented in Figure 6.

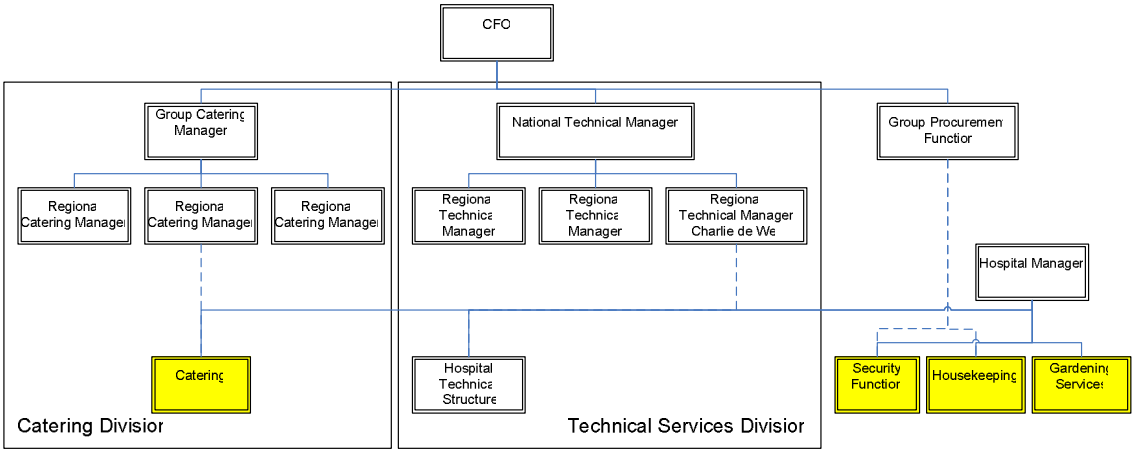


Figure 7: FM Organisational Chart of the Netcare Group

The Netcare Group manages some FM functions through a national support structure that is aligned with functionality. Soft FM functions are managed through a group structure (i.e. Catering and Technical Services) for some functions and a hospital structure for others (i.e. Security, Housekeeping, Gardening). The structure is presented in Figure 7.

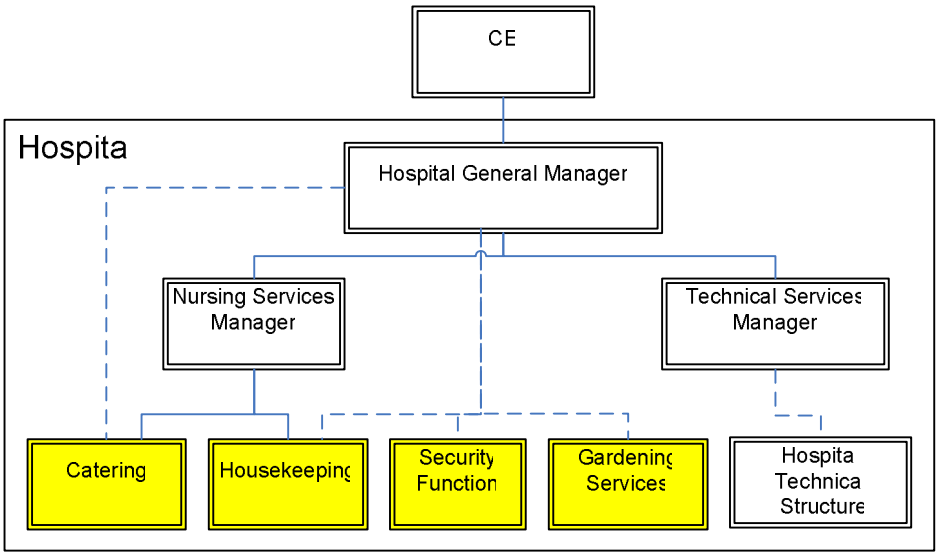


Figure 8: FM Organisational Chart of the Clinix Group

The Clinix Group manages all FM functions from hospital level. Figure 8 presents the structure of the Clinix Group a the time of the research.

The organisational design appears to be very similar in the three large healthcare groups with a centralised support structure supporting FM functions. In all groups, hard FM functions such as Engineering are not outsourced whereas soft FM functions are found to be consistently outsourced.

4.3.8 Discussion Relating to Question 4

All Facilities Management functions identified through question 2 were grouped and managed through a Catering, Housekeeping, Security, Gardening and Engineering function in South African institutions.

In general, it was found that the soft FM functions such as Catering, Housekeeping, Security and Gardening services were consistently outsourced.

Hard FM functions such as Engineering (including clinical, electrical, mechanical and civil services) were consistently performed in-house.

Current practice in private healthcare in South Africa is also supported by trends noted from the literature review presented in section 2.4.2 where the prevalence of outsourcing was discussed. This also supports the first proposition that FM functions should not be outsourced as one function.

4.3.9 Results of Question 5

Question 5 created an understanding of the influence the Respondents had on the Facilities Management structure in the respective organisation. This would further lend credibility to the Respondents selection. The question that was posed was:

> "To what degree have you been part of creating/shaping the Facilities Management function in your organisation?"

Respondents were asked to elect one of the following levels of involvement, either "Personally Shaped", "Limited Involvement" or "No Involvement". Responses are tabled in Table 20.

Table 20: Responses to Question 5

Respondents	Response
Charlie de Wet	Inherited Structure
Maartin Zimmermann	Personally Shaped
Kevin Poggenpoel	Lesser Involvement
Vincent MacQueen	Personally Shaped
William Osburn	Personally Shaped

Respondents covered the full range of options, from being individually responsible for shaping the structure to not being involved at all. Messrs Zimmermann, MacQueen and Osburn were directly tasked to shape Facilities Management in their respective organisations hence were directly responsible for its organisational structure.

4.3.10 Discussion Relating to Question 5

The degree to which the individuals elected to shape FM in their organisations was included purely to add to credibility to the responses received in the following question. Given that a number of respondents were intimately involved with shaping the organisational structure, reasons posed for current structures would have some degree of credibility.

4.3.11 Results of Question 6

Question six explores the reasons for the way Facilities Management function was shaped the way it was. The specific question that was posed was:

> "Why has the Facilities Management function been designed the way it currently is?"

During the interview, each reason cited was explored to gain an understanding of what led to the organisational design. Respondents were allowed to express their perceptions freely. The essence of the reasons were summarised and read back to the respondents to ensure that the point was properly understood. These reasons are reproduced in Table 21.

Table 21: Reasons for the Structure of FM

Reasons	Response by
It was driven by financial constraints. These constraints did not allow for a formal FM structure.	Vincent MacQueen
Small facilities also did not allow for a formal FM structure as the cost to have persons appointed to manage these functions would not have justified it.	Vincent MacQueen
The implementation of the FM function in this particular organisation was faced with constraints, particularly the availability of skilled people. The structure was therefore created with the aim of being lean and efficient.	Maartin Zimmermann
The structure also made the most sense in terms of executing standardised policies and procedures. It was recognised that efficiency could be obtained through standardisation and was reflected in the structure.	Maartin Zimmermann

Reasons	Response by
A hospital based direct-line reporting structure was already in place. This structure was kept in place due to accountability that needed to be kept with the Business Unit Manager.	Maartin Zimmermann
The previous Facilities Management structure did not cater for the growth that the organisation experienced in recent years. It was felt that top management was getting intimately involved in all facilities and had a serious impact on their efficiency. The current structure was designed to diversify decision making.	Kevin Poggenpoel
The FM functionality was designed due to the experience gained previously in the Group.	Kevin Poggenpoel
The business executive created four main functions that Medi-Clinic viewed as core. Each core area manager could then shape that part of the business to deliver set outputs.	Kevin Poggenpoel
Strong individuals in the organisation built silo structures around themselves.	Charlie de Wet
Nobody has designed the FM function at a macro level.	Charlie de Wet
The structure is in the process of evolution, as happens with all companies that continually grows, as is the case with Netcare.	Charlie de Wet
There was a fundamental understanding of how interconnected Facilities Management was. It was shaped with tiered reporting to the Hospital Manager to ensure such interconnection remained functional.	William Osburn
A restriction on the appointment of additional manpower prohibited an optimal structure to be designed. The FM function was distributed between management already in place.	William Osburn

Responses could be classified into those relevant to smaller and larger groups. Smaller groups consistently reported that financial constraints were the main contributor to shaping the structure. With larger groups, where financial constraints were not as acute, external factors such as availability of skills and internal factors such as aligning the FM functions with previously set up structures, were consistently cited as influencing the FM management design.

4.3.12 Discussion Relating to Question 6

Discussions that explored the reasons for current organisational structures highlighted that the relative size of the organisation played a significant role in

its design. In small groups, such as the Community and Clinix Groups, financial considerations were the overriding driver of structure. Judging from national structures already in place in the large groups, there appears to be a critical business size where a group structure can extract advantages. As structures are typically formed when a group is still small, these structures typically do not cater for a growing business. This point was made by Mr Poggenpoel. As the previous Medi-Clinic structure did not allow for the needs of a growing business, the structure had to be re-engineered. In general, such re-engineering would need to take place when the business has already grown substantially. Given the inevitable complexity that a larger organisation would entail, structuring any function, such as Facilities Management, may not be optimal to enable capturing of business process that could lead to higher efficiency.

In conclusion, responses may suggest that Facilities Management structures in private healthcare organisations in South Africa may have grown without evolving efficiently to allow more appropriate business processes to be investigated. This supports that current FM functions may not have been structured optimally. The discussion created sufficient questions to explore alternative structures and was probed in the following question.

4.3.13 Results of Question 7

Question 7 explored the different ways of structuring the function. The specific question that was posed was:

> "Could you think of any other basis of segmenting Facilities Management?"

A summary of the suggestions as well as points made during the discussion is presented per respondent in Table 22.

Table 22: Alternative Structuring of Facilities Management

Alternative	Response by
It was driven by financial constraints. These constraints did not allow for a formal FM structure.	Vincent MacQueen
Small facilities also did not allow for a formal FM structure as the cost to have persons appointed to manage these functions would not have justified it.	Vincent MacQueen
In the current structure, it was felt that some functions were duplicated or under utilised. By segmenting along functional areas (such as catering) rather than along locations (such as a single or multiple facilities), further efficiencies can be obtained. It was recognised that there could be barriers (such as logistical issues) for making such a structure work efficiently as well as realising the advantages.	Maartin Zimmermann
Easy to box and delineate along functional areas, but it was found that this did not suit the organisation.	Kevin Poggenpoel
Facilities of the same size should be grouped together and structures should be designed around it. One structure for all sizes of facilities does not work.	Charlie de Wet
The structure should be aligned to function well as a business unit.	William Osburn

All respondents had a view that the functions could be split differently. The main point mentioned repeatedly was an alignment of functions across different business units.

4.3.14 Discussion Relating to Question 7

It became evident that small groups have very little option to structure Facilities Management due to the critical business mass that is required to substantiate such a structured function.

From the interviews the perception was left that no clear structure for the management of facilities has been identified and that all groups were still in a process of finding an optimal structure. This may be due to a rapidly changing legislative environment in South Africa at the time of the research.

4.3.15 Results of Question 8

Question 8 explored the perceived advantages and disadvantages that the organisation gained from the structure that was implemented. The direct question that was posed was:

> "Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?"

All respondents were encouraged to identify both advantages and disadvantages of their current structures. A summary of the main advantages is presented in Table 23. A summary of the main disadvantages is presented in Table 24.

Table 23: Advantages of Current FM Structure

Advantages	Response by
A perceived cost saving due to the entire FM function being integrated under one person was identified.	Vincent MacQueen
The simple structure resolved in little red tape and allowed for quick decision making that made the structure efficient.	Vincent MacQueen
The structure is lean-and-mean with little chance of dead wood.	Maartin Zimmermann
There was a fundamental belief that the current structure worked well.	Maartin Zimmermann
Systems, such as the asset management systems, could be standardised. Policies and Procedures can be aligned.	Maartin Zimmermann
The structure supported networking for efficient flow of information and business processes.	Maartin Zimmermann
The four core areas performed as one team rather than silos.	Kevin Poggenpoel
Much synergy was obtained through a team effort.	Kevin Poggenpoel
People and skills can be efficiently moved between facilities.	Charlie de Wet
Good organisational order is created with the current structure.	Charlie de Wet
Efficient alignment of the organisation is possible through Policies and Procedures.	Charlie de Wet
The structure allows for tailoring to suit changing business environment.	Charlie de Wet
Facilities Management cost is relatively low due to small hospital based staffing structure.	William Osburn
Decision making is very quick as very little red tape exists. This is in part possible due to relative small size of the Clinix group.	William Osburn

The perception that the current structure was cost efficient (mentioned by 3 of the 5 respondents) was raised. Alignment of policies and procedures, flexibility of resources as well as an efficient decision making process was also mentioned by at least two respondents. In all, seven different advantages could be identified that strengthened the perception of an efficient, but not optimal, structure being in place.

Table 24: Disadvantages of Current FM Structure

Disadvantages	Response by
The management structure in place in the group made direct line reporting in the FM management function impossible. Due to the hospital manager having direct line reporting from each operational function in the facility, the FM management structure had a dotted line reporting structure at best. Due to a fundamental conflict in business objectives, FM objectives were never aligned with financial objectives.	Vincent MacQueen
The lean-and-mean structure made it challenging to cope with unexpected changes such as changes in legislative frameworks.	Maartin Zimmermann
Conflicts may arise due to the matrix reporting structure. It was identified that performance drivers in Facilities Management may not always be aligned with Business drivers.	Maartin Zimmermann
Conflicts arise due a difference in perceived importance of FM related functions.	Maartin Zimmermann
A power struggle is possible between FM functions.	Charlie de Wet
No uniformity exist in Facilities Management.	William Osburn
No support for the generation of aligned Policies and Procedures from the Group – each facility is doing its own thing.	William Osburn
No fall-back position for Facilities Management.	William Osburn

Very little convergence was found in the disadvantages. Mr Poggenpoel was the only respondent that believed that there was no disadvantage to the structure in place.

4.3.16 Discussion Relating to Question 8

From the advantages and disadvantages cited, no clear conclusion could be drawn if an optimal Facilities Management structure has been implemented. This does not substantiate or refute the first proposition.

4.3.17 Results of Question 9

Question nine explores the perception of the degree to what the FM functional structure will allow the outsourcing decision to be made. The specific question that was asked was:

> "To what degree will the current organisational structure influence the decision making process to outsource Facilities Management?"

A summary of perceptions cited is presented in Table 25:

Table 25: Degree of Influence of Outsourcing the FM Function

Influence	Response by
Outsourcing was explored and implemented on a functional basis as opposed to being one function. The reason why certain functions were outsourced was not clear.	Vincent MacQueen
The organisation recently had its laundry outsourced. In the current organisational structure, the operational function at facilities level would identify the business opportunity that outsourcing would bring. This function would then be transferred to the Group Procurement function. The process of outsourcing would be managed by this function.	Maartin Zimmermann
The current structure lends itself well to outsourcing selected functions. These functions are grouped under the "Hospitality" function. As soon as an outsourcable function is identified, it is moved to this function for appropriate management.	Kevin Poggenpoel
The structure was seen as aiding the outsourcing process. National level negotiations can be done easily; access to economics of scale is possible. The structure was also perceived to be very flexible and could easily be re-engineered to suit a different reporting structure.	Charlie de Wet
The structure is not aligned from top to bottom – certain discontinuities could make buy-in of the process difficult.	Charlie de Wet

Influence	Response by
The effect of external role-players can not be taken into account – professionals such as surgeons may be influenced by the decision but due to the nature of the relationship in South African between clinical professionals and the healthcare group, this would always remain difficult to manage.	Charlie de Wet
The structure does not allow for aligned decision making – decision making is fragmented.	William Osburn
Facility Management is not outsourced as a unit that may have led to benefits not realised due to economies of scale.	William Osburn

In all cases, except in the case of the Clinix Group, it was perceived that the Facilities Management design in its structure during the time of the interview, would aid the outsourcing decision. Some concerns however, were noted.

4.3.18 Discussion Relating to Question 9

The perception left after the interviews was that the groups had implemented a structure aligned in terms of functionality but that the decision making power was not aligned. This could hamper the outsourcing decision as an individual could easily motivate a change in business process (such as outsourcing) without being challenged by an aligned functional area.
This could be an indication that the management structure in some FM functions are not appropriately developed and is substantiated by statements made regarding financial constraints.

4.3.19 Results of Question 10a

Question 10 explored the perception if Facilities Management should be outsourced as a singular function. The specific question that was posed was:

> "Should the Facilities Management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?"

Possible answers that were offered were “Single Function”, “Not outsourced” or “Hybrid”. Results of the individual responses are presented in Table 26

Table 26: Responses to Question 10

Respondents	Response
Charlie de Wet	Hybrid
Maartin Zimmermann	Hybrid
Kevin Poggenpoel	Hybrid
Vincent MacQueen	Hybrid
William Osburn	Single Function

The responses were that 80% of the respondents considered that the FM function should be managed as a hybrid model.

4.3.20 Results of Question 10b

In response to question 10a, the respondent was asked why he had such a perception. A summary of responses are presented in Table 27:

Table 27: Summary of Reasons Given for Responses in Question 10a

Influence	Response by
Due to the complexities that exist in healthcare facilities management, no single company has the capacity to successfully offer an integrated outsourcing option. Some functions that are not complex and may be viewed as non-core as well as having a low risk profile, may be outsourced easier than more complex functions.	Vincent MacQueen
It was also perceived from the interview that if a function could be outsourced successfully, it would be done. In functions where the risks were not known, or where the outsourcing decision was complex, it would not be done.	Vincent MacQueen
Specialists in the field of facilities management could do it better due to their specialist knowledge.	Maartin Zimmermann
Some functions are too close to core to outsource	Maartin Zimmermann
Some functions have a high administration burden	Maartin Zimmermann
Due to the complexity of some of the FM Functions	Kevin Poggenpoel
To diversify the risk of outsourcing	Kevin Poggenpoel

Influence	Response by
Some FM functions are just to complex to outsource	Charlie de Wet
The economic decision variables that would drive an outsourcing decision, is not consistent for the functions inside Facilities Management	Charlie de Wet
The correct management of the Facilities Management should be left to a single expert to ensure objectivity as the individual hospital can not have such objectivity.	William Osburn

In essence, most respondents perceived the domain of Facilities Management in healthcare too complex to outsource as one single function.

4.3.21 Discussion Relating to Question 10

It was perceived by most respondents (4 of the 5) that the function of Facilities Management is too complex to outsource as a single entity.

The response from Mr Osburn that it should be outsourced as one entity was based on the perception that one person at a Group level would have a higher level of understanding that he would have, given that the outsourcing decision was currently done by him. The response may be appropriate in the context that the Clinix Health Group finds itself in and would not detract from the convergence in opinion formed by the other respondents.

This strongly substantiates the first proposition made.

4.3.22 Results of Question 11a

Question 11 explores perception about the ability of the South African market to successfully offer a single outsourcing solution to healthcare. The direct question posed was:

> "Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?"

Responses are tabled in Table 28:

Table 28: Responses to Question 11a

Respondents	Response
Charlie de Wet	No
Maartin Zimmermann	No
Kevin Poggenpoel	No
Vincent MacQueen	No
William Osburn	No

The responses were unanimous that no respondent could foresee that the FM function could be outsourced as one function.

4.3.23 Results of Question 11b

Question 11b was asked if any respondent answered “Yes” to question 11a. The question that would have been asked was:

> “If so, what do you foresee you major challenge will be?”

As all persons answered “No” to question 11a, no answer is applicable to this question.

4.3.24 Results of Question 11c

As all respondents answered “No” in question 11a, the major obstacles to outsourcing the function as a single entity were explored. The specific question posed was:

> “If not, what do you foresee as being the major obstacles?”

A summary of responses are presented in Table 29.

Table 29: Major Obstacles to Outsourcing as a Single Function

Obstacles	Response by
Some functions are very specialist in nature.	Maartin Zimmermann
The perceived risk of outsourcing some functions are very high while other functions are less risky.	Maartin Zimmermann
The organisation has tried – it was that the outsourced company was in it purely for profit.	Kevin Poggenpoel
It was perceived that no company would have the required skill set to successfully do this.	Kevin Poggenpoel
The quality of people would be worse than what is required.	Kevin Poggenpoel
Employees of outsourced company have absolutely no loyalty to the parent company.	Kevin Poggenpoel
That the output of the outsourced function is not aligned with wider business objectives. The SLA needs to be accurate to attain this.	William Osburn

4.3.25 Discussion Relating to Question 11

There was complete convergence regarding the perception that the function of Facilities Management should not be outsourced as a single entity. Significant obstacles included management of the outsourced function as well as the risks associated with the process. It was deemed risky to outsource to one company as there was a belief that no single company would have the full set of skills to do this efficiently.

This further substantiates Proposition 1.

4.4 Results Pertaining to Proposition 2

4.4.1 Results of Question 12

In pursuit of the second proposition, an initial perception was gauged of the relative importance of financial versus non-financial considerations when an outsourcing decision is made. The specific question asked was:

"Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?"

The responses were limited to either "Financial" or "Non-financial". Results are presented in Table 30.

Table 30: Responses to Question 12

Respondents	Response
Charlie de Wet	Non-financial
Maartin Zimmermann	Non-financial
Kevin Poggenpoel	Non-financial
Vincent MacQueen	Financial
William Osburn	Financial

In their responses, there was a clear split between the large and smaller healthcare groups. Managers in large groups consistently responded that non-financial considerations were more important than financial.

Given that each respondent was forced to elect the most important criteria, some debate ensued. It was generally argued that both financial and non-financial parameters would need to make business sense for a function to be outsourced.

The following reasons, as presented in Table 31, were cited for the above answer:

Table 31: Reasons Cited for Initial Perception

Reasons	Response by
It was perceived that any outsourcing decision would be based purely on financial parameters and only that.	Vincent MacQueen
Non-financial was perceived to be the most important, but the point was made clear that both financial and non-financial parameters need to make sense before the decision is made.	Maartin Zimmermann

Some items are critical, no matter what the cost is. In private healthcare, it was perceived that quality of a service is most critical.	Charlie de Wet
Both should be considered, but due to the business cycle that the hospital found itself in over the past few years, the emphasis was to reduce the operational costs, hence this was the primary objective.	William Osburn

Most responses verified that both financial and non-financial parameters should be considered. Mr Poggenpoel did not state a reason for his perception but was very clear that there was little doubt in his response.

4.4.2 Discussion Relating to Question 12

From the discussion with each respondent it became clear that private healthcare has very different business drivers. From the consistent reasons cited by operators of large groups that non-financial parameters are more important when it came to the outsourcing decision, it became clear that the need to differentiate service levels and to provide a niche from competitors was underlying to this perception. Smaller groups were consistently pressured by low margins to a degree that compromised the Facility Management function.

The perception that non-financial criteria are more important will be tested by question 13.

4.4.3 Results of Question 13a

Question 13 explored the relative importance of financial and non-financial decision parameters. Each respondent was presented with a table of all parameters identified in the literature review. Tables 10 and 11 were combined and sorted in alphabetical order. Respondents were asked to read through the list and to place a tick next to all parameters that they deemed important and a cross next to all those they did not deem important when making an outsourcing decision. The specific question asked was:

"Please rank the following outsourcing decision variables in order of importance:

Respondents were requested to rank those parameters selected in order of importance – assigning "1" to the parameter they deemed as being the most important and sequentially numbering the rest in order of importance. Results are presented in Table 32.

Table 32: Rating of Financial and Non-financial Parameters

Service Category	CW	KP	MZ	VQ	WO
Ability to access best in class skills and capabilities	11	8	14	-	3
Accelerate re-engineering benefits	10	5	15	-	14
Access to latest technology/infrastructure	12	-	13	9	8
Augment staff	-	7	-	8	-
Benefit through economies of scale	9	6	16	3	13
Better accountability/management	8	-	6	-	2
Cash Infusion of assets sold	-	-	-	-	-
Copy competitors	-	-	-	-	-
Creates ability to focus on core functions	7	-	7	-	7
Decision driven by minimal cost boundary	13	-	-	-	16
Flexibility	6	-	5	-	15
Freeing constraints of in-house cultures and attitudes	-	4	-	-	4
Get rid of problem functions	-	12	-	7	18
Greater flexibility	4	-	4	-	-
Increased ability to configure resources	5	3	11	6	17
Increased ability to meet challenging market needs	-	10	10	5	1
Increased speed	-	-	3	-	9
Legal compliance	3	9	1	-	10
More efficient exploitation of cutting edge healthcare technology		11	12	4	11
Provision of fresh ideas and objective creativity	14	2	9	-	6
Quality improvement	1	1	2	2	5
Reduce political pressures or scrutiny	-	-	-	-	-
Reduced costs	2		8	1	12
Short term balance sheet and P&L benefits	-	-	-	-	-
Transfer fixed costs to variable	-	-	-	-	-

Between 9 and 18 parameters were selected by each respondent as being important. Only two parameters - that of “Quality Improvement” and “Increased ability to configure resources” were deemed important by all. Five parameters were not deemed important by any of the respondents.

The frequency that each parameter was selected as being in the top 3, top 5 and top 8 responses by each respondent is presented in Table 33 and 34. Table 33 lists the financial– and Table 34 lists the non-financial parameters from the constructs listed in Table 32. The figure would indicate the number of times the particular construct was selected as being under the top 3, top 5 and top 8. A “0” would indicate that no respondent deemed that particular parameter as being very important. A “5” would indicate that all 5 respondents regarded the parameter as being of a top 3, top 5 or top 8 importance respectively.

Table 33: Frequency of Selecting Financial Parameters

Service Category	Top 3	Top 5	Top 8
Cash Infusion of assets sold	0	0	0
Decision driven by minimal cost boundary	0	0	0
Short term balance sheet and P&L benefits	0	0	0
Transfer fixed costs to variable	0	0	0
Benefit through economies of scale	1	1	2
Flexibility	0	1	2
Reduced costs	2	2	3

From the above frequency, four financial parameters out of seven (57%) were not deemed under the 8 most important. The parameter regarded as most important was the construct of “Reduced Costs”.

Table 34: Selection Frequency of Non-financial Parameters

Service Category	Top 3	Top 5	Top 8
Access to latest technology/infrastructure	0	0	1
Augment staff	0	0	2
Copy competitors	0	0	0

Service Category	Top 3	Top 5	Top 8
Creates ability to focus on core functions	0	0	3
Get rid of problem functions	0	0	1
Reduce political pressures or scrutiny	0	0	0
Ability to access best in class skills and capabilities	1	1	2
Accelerate re-engineering benefits	1	1	1
Better accountability/management	1	1	3
Increased speed	1	1	1
More efficient exploitation of cutting edge healthcare technology	0	1	1
Provision of fresh ideas and objective creativity	1	1	2
Freeing constraints of in-house cultures and attitudes	0	2	2
Greater flexibility	0	2	2
Increased ability to configure resources	1	2	3
Increased ability to meet challenging market needs	1	2	2
Legal compliance	2	2	2
Quality improvement	4	4	5

Table 34 indicates that all except two non-financial parameters were deemed under the top 8 most significant parameters. The highest regarded non-financial parameter was the improvement of quality.

To calculate the relevant importance between financial and non-financial parameters, each of the top 8 elected by each respondent was assigned a score. A ranking of 1 attracted a score of "1" and a ranking of 8 attracted "0.125". Ranking of lower than 8^{th} was assigned a score of "0". The following formula was used to calculate the scores.

Score = (9-Ranking) x 0.125 for Ranking between 1 and 8 or
= 0 for Unranked and Ranking between 9 and 18

The scores for financial parameters are presented in Table 35.

Table 35: Scoring for Financial Parameters

Service Category	CW	KP	MZ	VQ	WO	Total
Cash Infusion of assets sold	0	0	0	0	0	**0**
Decision driven by minimal cost boundary	0	0	0	0	0	**0**
Short term balance sheet and P&L benefits	0	0	0	0	0	**0**
Transfer fixed costs to variable	0	0	0	0	0	**0**
Benefit through economies of scale	0	0.375	0	0.75	0	**1.125**
Flexibility	0.375	0	0.5	0	0	**0.875**
Reduced costs	0.875	1.125	0.125	1	0	**3.125**

The total score achieved by financial parameters (scalar sum of "Total" in Table 35) is 5.125 and will only be comparable relative to the non-financial parameters. These scores are presented in Table 36 and are calculated consistently with Table 35.

Table 36: Scoring for Non-financial Parameters

Service Category	CW	KP	MZ	VQ	WO	Total
Access to latest technology/infrastructure	0	0	0	0	0.125	**0.125**
Augment staff	0	0.25	0	0.125	0	**0.375**
Copy competitors	0	0	0	0	0	**0**
Creates ability to focus on core functions	0.25	0	0.25	0	0.25	**0.75**
Get rid of problem functions	0	0	0	0.25	0	**0.25**
Reduce political pressures or scrutiny	0	0	0	0	0	**0**
Ability to access best in class skills and capabilities	0	0.125	0	0	0.75	**0.875**
Accelerate re-engineering benefits	0	0.5	0	0	0	**0.5**
Better accountability/management	0.125	0	0.375	0	0.875	**1.375**
Increased speed	0	0	0.75	0	0	**0.75**
More efficient exploitation of cutting edge healthcare technology	0	0	0	0.625	0	**0.625**
Provision of fresh ideas and objective creativity	0	0.875	0	0	0.375	**1.25**
Freeing constraints of in-house cultures and attitudes	0	0.625	0	0	0.625	**1.25**
Greater flexibility	0.625	0	0.625	0	0	**1.25**
Increased ability to configure resources	0.5	0.75	0	0.375	0	**1.625**
Increased ability to meet challenging market needs	0	0	0	0.5	1	**1.5**
Legal compliance	0.75	0	1	0	0	**1.75**
Quality improvement	1	1	0.875	0.875	0.5	**4.25**

The total weighted score achieved (scalar sum of "Total" in Table 36) by non-financial parameters is 18.5. As ranking was performed on a single dataset of financial and non-financial parameters, the conclusion can be reached that non-financial parameters were rated more significantly than financial parameters.

4.4.4 Results of Question 13b

Question 13b explored the reasons for ranking the above. The specific question asked was:

"Why did you rank the above in this order?"

A summary of reasons that were given during the subsequent discussion is presented in Table 37.

Table 37: Reasons Cited for Ranking Non-financial Parameters

Reasons	Response by
The Respondents had the fundamental belief that the cost/service balance is the most critical driver and that the two are linked – higher cost gives higher service. The rest of the drivers were not deemed as important.	Vincent MacQueen
The legal and quality issues around delivering facility management functions were seen as being critical to the decision. Hospitals are about being safe and hence safety is critical.	Maartin Zimmermann
The quality of the service that is to be provided was deemed to be the overriding factor.	Kevin Poggenpoel
Quality is non-negotiable. The fundamental business driver – that of cost effectiveness – needs to make sense inevitably, one should not be concerned about that at all, it is about the other drivers.	Charlie de Wet
The facility needed to re-gain market confidence and market share. This was the main objective that would also drive the decision process.	William Osburn

In most responses (80%), the notion of a cost/quality balance was cited as the most important criteria. This was used to select the top rankings. No further strategy was elected by the respondents to assign lesser rankings.

4.4.5 Discussion relating to Question 13

Through inspection of the total score as presented in Tables 35 and 36, the top rated decision parameter was that of "Quality Improvement". Given the relative high score this parameter attracted, there is an overwhelming perception that outsourcing will be contemplated to improve the quality of service that will be rendered. This was also substantiated by the rankings awarded by each person.

Given that a possible biasness towards the importance of financial and non-financial parameters were removed through merging the constructs and listing them alphabetically, the relative scores can be used to substantiate the notion that non-financial objectives are more important when the outsourcing decision is contemplated than financial parameters.

Financial parameters were deemed so relatively unimportant that 4 out of the 7 parameters were not under the top 8 elected criteria.

This directly and strongly substantiates the initial perception explored in Question 12 as well as the second proposition.

4.4.6 Results of Question 14

To test the validity of parameters from the literature review, each respondent was asked if there were any other constructs applicable in the South African context given that literature presented this research with constructs applicable to foreign countries. The specific question was:

"Are there any other benefits you can think of?"

The single response by Mr Zimmermann is presented in Table 38.

Table 38: Other Benefits Derived from Outsourcing

Benefits	Response by
Access to local skills could be improved through outsourcing.	Maartin Zimmermann

From inspection, the perceived additional benefit is very similar to the first benefit of “Ability to access best in class skills and capabilities”. From the interview it was clear that Mr Zimmermann perceived the availability of local skills to be limited and that outsourcing could be a feasible way to gain access to it.

4.4.7 Discussion relating to Question 14

The completeness of the literature review is substantiated by receiving only a single response to Question 14. As argued, the response is a single nuance on one already provided in the literature.

4.4.8 Results of Question 15a

The second part of Proposition 2 is explored using the same methodology as the fist part. A list of risk factors, compiled in the literature review, was presented to the respondents for inspection. The factors perceived to be important was identified through placing a tick next to it. Only factors deemed as important when taking the outsourcing decision was then ranked in order of importance. A ranking of “1” was again assigned to the most important factor. The specific question posed was:

> “Please rank the following risk factors in order of most important to least important to your organisation.”

The results are presented in Table 39.

Table 39: Ranking of Risk Factors

Service Category	CW	KP	MZ	VQ	WO
Lack of skills and competence to manage outsourced relationships	4	7	4	3	-
Increased cost of relationship management	-	8	8	4	3
Requirement to develop new decision making processes	3	6	7	8	-

Service Category	CW	KP	MZ	VQ	WO
Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	1	1	3	5	1
The ability to manage relationships rather than processes	-	5	6	6	-
Difficulty to in-source later	-	3	2	2	-
Difficulty to decide how close to core to outsource	2	4	5	7	2
Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company	-	2	1	1	4

In general, most of the risk factors identified in the literature review were deemed important in South Africa. Only one factor – that of ”Difficulty to decide how close to core to outsource” was consistently regarded as important by all. There was no risk factor deemed insignificant by all.

The risk factors were scored using the following formula:

Score = (9-Ranking) x 0.125 for ranked risks or
= 0 for unranked risks

Relative scores from data contained in Table 39 are presented in Table 40.

Table 40: Relative Scoring of Risk Factors

Service Category	CW	KP	MZ	VQ	WO	Total
The ability to manage relationships rather than processes	0	0.5	0.375	0.375	0	**1.25**
Requirement to develop new decision making processes	0.75	0.375	0.25	0.125	0	**1.5**
Increased cost of relationship management	0	0.125	0.125	0.625	0.75	**1.625**
Lack of skills and competence to manage outsource relationships	0.625	0.25	0.625	0.75	0	**2.25**
Difficulty to in-source later	0	0.75	0.875	0.875	0	**2.5**
Difficulty to decide how close to core to outsource	0.875	0.625	0.5	0.25	0.875	**3.125**

Service Category	CW	KP	MZ	VQ	WO	Total
Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	0	0.875	1	1	0.625	**3.5**
Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	1	1	0.75	0.5	1	**4.25**

From the above, it is apparent that from the identified risks, the failure to correctly identify core and non-core functions and subsequent outsourcing of core functions that may impact on competitive advantage was perceived as the biggest risk.

4.4.9 Results of Question 15b

To test if South Africa's private healthcare sector could pose different risks to outsourcing functions, respondents were requested if they foresee any additional risks that may be unique to South Africa. The specific question was:

"Are there any other risk factors you can think of?"

Responses are presented in Table 41.

Table 41: Additional Risk Factors

Reasons	Response by
The stability of the company that the function was outsourced to was important given the economic downturn during the time of the interviews.	Maartin Zimmermann
The ability of the company that was outsourced to, to retain the critical skills it needs to maintain acceptable service levels.	Maartin Zimmermann
The company's track record could be false. There is a risk that the due diligence that was done on the prospecting partner could be incorrect or misleading.	Charlie de Wet
The outsourcing company does not attach the same urgency to matters as would staff in a healthcare facility.	William Osburn

Risk relating to the economic situation South Africa was facing during the time of the interview as well as risk relating to ethical and alignment issues were identified.

4.4.10 Discussion Relating to Question 15

From the results presented above, it is concluded that the risks identified in literature is also applicable to private healthcare in South Africa. The effect of outsourcing the FM function as a singular function in terms of risk mitigation is now explored in order of perceived risk.

The biggest risk identified, with a relative weighting of 4.25 (Table 40), was that of an inability by the business to differentiate between core and non-core and to outsource inappropriately. It can be argued that by managing the FM function as a hybrid of outsourced and in-house functions, this risk is increased through repeatedly having to make the decision. This would refute the risk mitigations posed in Proposition 2.

The risk of not understanding or not having the skills and competence to design appropriate service level agreements with the outsourcing company (weighting of 3.5, Table 40) would also increase if a hybrid type Facilities Management structure is employed. It could be argued that by segmenting FM functions along functional lines, the complexity of service level agreements could be reduced. It is therefore not conclusive that this risk can be mitigated through a diversified outsourcing arrangement.

The risk of added difficulty to decide how close to outsource, as argued having the highest perceived risk, is increased with multiple outsourcing arrangements and therefore also refutes the mitigation of risk as proposed in Proposition 2.

Difficulty to in-source later, on the contrary, is reduced through a multiple outsourcing design. Agreements for Facilities Management can gradually be terminated as the ability of the organisation to cope, strengthens. Mitigation of risk, as proposed in Proposition 2 is therefore substantiated.

In terms of the risk of being able to manage relationships (weighting of 2.25), the skills required to manage multiple relations as well as developing new decision making processes, it is perceived that outsourcing to multiple companies would increase the risk and would refute risk mitigation as proposed. This would be true for the cost of managing relationships with multiple stakeholders as well.

4.4.11 General Observations and Comments

During the interviews, general comments were made that contributed to understanding the dynamics in Facilities Management in healthcare. The comments are presented in Table 42.

Table 42: Summary of General Observations and Comments

Reasons	Response by
Skills are needed to ensure that SLAs are reached rather than management skills. Outsourcing therefore needs different skills sets.	Vincent MacQueen
It was perceived that no single company in South Africa has the diversity of skills needed to take on an FM outsourcing role for a major healthcare group.	Vincent MacQueen
It was further perceived that it had not been previously done in South Africa. Many outsourcing companies have tried to sell their services. In all cases, financial drivers were used to justify the decisions. Companies would estimate a percentage saving on the FM budget at that time and would advise on a “profit sharing scheme”.	Vincent MacQueen
There was a fundamental differentiation in the organisation with regards to how typical FM functions are managed. Those functions that were contracted out were managed by the Procurement function as out-sourced functions were regarded as commodities. In-house functions reported within a matrix type management structure. Direct line reporting occurred between functions in each business unit (being a hospital) as well as dotted line reporting within	Maartin Zimmermann
The accountability for functions in a healthcare environment could not be outsourced	Maartin Zimmermann
The need to manage the outsourcing entity is very important. Many outsourced functions do not live up to expectations due to improper management.	Maartin Zimmermann
With outsourcing of FM functions, it is important to have an accurate asset management system in place to monitor performance.	Maartin Zimmermann

Reasons	Response by
An SLA needs to be in place to manage the function properly.	Maartin Zimmermann
It was commented that the American healthcare system seems to write computer software applications to manage FM functions.	Kevin Poggenpoel
It was put forward that all functions in a hospital are core. A hospital can not deliver a service efficiently if one of the functions is not functioning. The example that was cited that if laundry does not produce linen of the required quality, the patient can not be accommodated in a bed.	Kevin Poggenpoel
The notion of synergies was also discussed. Synergies between functions can usually not be measured and could easily be forgotten when assessing the appropriateness of the outsourcing decision.	Kevin Poggenpoel
The real long term cost of outsourced functions not performing could creep up over a long time.	Kevin Poggenpoel
Patients rarely complain about the services of the doctors, They usually complain about soft issues such as cold food, dirty or soiled linen or that the closet maid did not clean properly. This is what they share with others and so the facility gets a bad name not the company performing the function.	Kevin Poggenpoel
The ultimate driver of a company's structure should be to minimise cost.	Charlie de Wet

Many appropriate comments were made during the interviews regarding the management of healthcare facilities. Although these comments were not aligned with the specific questions, it lent such richness to the structured interview that it was presented here. Comments were found to be based on a deep understanding of FM functions that was gained through many years of engagement in the industry.

4.5 Summary of the Results

Given the structured way in which the interviews were conducted, respondents were consistently guided to explore the propositions through a series of structured questions.

4.5.1 Results Relating to Proposition 1

Questions 1 to 11 explored Proposition 1.

Question 1 confirmed that the respondents were appropriately selected. Questions 2 to 6 explored current structures and perceptions about the efficiency of these structures. Question 7 prompted thinking to extend outside the realm at that time and to explore alternative structures. This was required to introduce questions 8 and 9 that probed advantages and disadvantages of structures at the time. Once advantages and disadvantages were explored, the fundamental questions could be asked that would directly lead into a discussion that was directly aligned with the first proposition. From an initial inspection of the results of Question 10a (Refer to Table 26), there appears to be a strong convergence in sentiment that Private Healthcare Facilities Management should be outsourced as a Hybrid arrangement i.e. not as a singular function. This is strengthened by a convergent response to Question 11 that it is not foreseen that it can be outsourced as one entity in South Africa. Reasons substantiating this was provided.

The results obtained from each of the interviews could refute, substantiate or be neutral to the first proposition. Table 43 provides a summary of the effect each question has on Proposition 1.

Table 43: Impact of Questions on Proposition 1

Question	Impact
One	Not applicable
Two	Not applicable
Three	Substantiates
Four	Substantiates
Five	Not applicable
Six	Not applicable
Seven	Not applicable
Eight	Neutral
Nine	No Impact
Ten	Strongly Substantiates
Eleven	Substantiates

In summary, there is significant evidence (4 of the 6 applicable questions) from the interviews conducted that supports Proposition 1.

4.5.2 Results Relating to Proposition 2

Questions 12 to 15 explored Proposition 2.

Question 12 explored initial perceptions of the perceived importance of financial and non-financial parameters when considering the outsourcing decision as well as reasons for these perceptions. Through ranking the parameters of the outsourcing decision in Question 13, it was found that non-financial considerations were deemed more significant than financial parameters when outsourcing FM functions. Question 14 yielded no significant additional parameters not already identified in the literature review. In terms of risk factors explored in Question 15, ranking indicated that a lack of understanding FM functions is the greatest risk to the business when outsourcing healthcare FM functions.

A summary of the relative weighting as well as the impact that the arguments have on the risk mitigation contemplated in Proposition 2, is presented in Table 44.

Table 44: Impact of Arguments on Proposition 2

Service Category	Weighting	Impact on Proposition
The ability to manage relationships rather than processes	**1.25**	**Refute**
Requirement to develop new decision making processes	**1.5**	**Refute**
Increased cost of relationship management	**1.625**	**Refute**
Lack of skills and competence to manage outsource relationships	**2.25**	**Refute**
Difficulty to in-source later	**2.5**	**Substantiated**
Difficulty to decide how close to core to outsource	**3.125**	**Refuted**

Service Category	Weighting	Impact on Proposition
Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	**3.5**	**Inconclusive**
Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	**4.25**	**Refuted**

It is suggested, through inspection of the summary of results in Table 42, that the notion that risk can be mitigated by employing separate outsourcing strategies, is refuted. This is substantiated by arguing that if the components that make up the total risk of outsourcing are refuted, the total risk mitigation is also refuted.

CHAPTER 5: CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction

This chapter will discuss the conclusions reached through this research before making recommendations in structuring the FM function in South African Private Healthcare.

Through comments made during interviews, some recommendations will also be made for possible future research.

5.2 Conclusions of the study

From perceptions at the time of this study by experts in healthcare, it is concluded that Facilities Management should not be managed as an integrated function in the South African Private Healthcare environment due to the specialist and diverse nature of some of its services. It substantiates published literature of private healthcare in other countries.

It was further found that non-financial drivers of the outsourcing decision are more significant in outsourcing some FM functions than financial drivers in private healthcare. In addition, the research ranked the importance of these decisions. This could aid current healthcare executives to make an informed decision if a function should be outsourced. The notion that the risk of outsourcing is mitigated by employing separate outsourcing strategies for FM functions could however, not be substantiated. This conclusion is not substantiated by literature in countries abroad.

5.3 Recommendations

Through this research, it is recommended that the function of Facilities Management in private healthcare is divided into functional aligned areas and that individual strategies are followed for managing each function.

5.4 Suggestions for further research

It was recommended in Section 5.3 that FM functions should be divided into aligned functions. The research indicated that no clear segmentation strategy exists. Current structures appear to be driven by functionality only as very few healthcare groups have truly devised an organisational design strategy for Facilities Management. Future research could explore optimal structures where business processes such as outsourcing can be explored efficiently.

Mr. Poggenpoel commented that synergies between outsourced functions could be lost due to misaligned objectives with each other. Future research could explore possible synergies and ways that these synergies could be exploited to obtain business advantage.

REFERENCES

Al-Zubaidi, H. (1997) Assessing the Demand for Building Maintenance in a Major Hospital Complex, Property Management, Volume 15 (3) pp. 173 - 183

Babbie, E. (2001). *The Practice of Social Res*earch, Oxford University Press, South African Edition, Cape Town

Bailey, W., *et al* (2002) Outsourcing in Edinburgh and the Lothians, European Journal of Purchasing and Supply Management, Volume 8 (2), pp. 83-95.

Barrett, P. (2000), Achieving Strategic Facilities Management Through Strong Relationships, Facilities, Volume 18 (10/11/12), pp. 421 - 426

Bell, J. (2005), Doing your Research Project, Open University Press, McGraw-Hill, 4th Edition, New York

Creswell, J.W. (2003), Research Design Qualitative, Quantitative and Mixed Methods Approaches, 2nd Edition, Sage Publications, Thousand Oaks

Database: Health Source: Nursing/Academic Edition *By The Numbers Outsourcing.* Modern Healthcare, 01607480, 12/18/2006 Supplement, Vol. 36

Drucker, P (1993) Post Capitalist Society, Harper Business, New York City pp 84-86

Ellram, L. and Billington, C. (2001), Purchasing Leveraging Decisions in the Outsourcing Decision, European Journal of Purchasing and Supply Management, Volume. 7 (1), pp. 15 - 27

Gilley, K.M. and Rasheed, A. (2000), Making More by Doing Less: An Analysis of Outsourcing and its Effects on Firm Performance, Journal of Management, Volume 26 (4), pp. 763 - 90

Goodsell, C.T. (2007) Six Normative Principles for the Contracting-Out Debate, Administration & Society; Volume 38 (6), pp. 669 - 688

Greaver, M.F. (1999), Strategic Outsourcing: A structured Approach to Outsourcing Decisions and Initiatives, American Management Association, New York, NY.

Guy, R.A. (2007) 10 Outsourcing Myths that Raise Your Risk, HFM (Healthcare Financial Management), Vol. 61 (6), pp. 67 - 72

Hamad, A. (2007) Journal of Quality in Maintenance Engineering; Aug2007, Vol. 13 Issue 3, p217-227, 11p

Harland C. and Knight L. (2005), Outsourcing: Assessing the Risks and Benefits for Organisations, Sectors and Nations, International Journal of Operations and Management, Vol. 25 (9), pp.831-850.

Heng, H.K.S. *et al* (2005) Beyond Strategy: Exploring the Brokerage Role of Facilities Manager in Hospitals, Journal of Health Organization and Management, Volume 19 (1), pp 16 - 31

Hospital Association of South Africa (2007): Introduction to HASA, http://www.hasa.co.za/index.asp?t=ns last accessed on 11 November 2007

Kakabadse, A. and Kakabadse, N. (2000), Sourcing: New Face to Economies Of Scale and the Emergence of New Organizational Forms, Knowledge and Process Management, Volume 7 (2), pp. 107 - 18.

Kane, D. (2007) Strategies Emerge to Bring Supply Costs Down H&HN: Hospitals & Health Networks, Volume 81 (8), p32 - 32

Kremic, T. *et al*. (2006) Outsourcing Decision Support: A Survey of Benefits, Risks and Decision Factors, Supply Chain Management: an International Journal, Volume 11(6), pp. 467 – 482

Laugen, B. *et al* (2005), Best Manufacturing Practices: What do the Best Performing Companies Do?, International Journal of Operations & Production Management, Volume 25 (2), pp. 131-50.

Leedy, P.D. (1993) Practical Research: Planning and Design, Macmillan Publishing Company, 5th Edition, New York.

Lonsdale, C. (1999), Effectively Managing Vertical Supply Relationships: A Risk Management Model for Outsourcing, Supply Chain Management: An International Journal, Volume 4 (4), pp. 176 - 83

McIvor, R. (2000), A Practical Framework for Understanding the Outsourcing Process, Supply Chain Management: An International Journal, Volume 5 (1), pp. 22-36

McLennan, P. (2004), Service Operations Management as a Conceptual Framework for Facility Management, *Facilities Journal,* Volume 22 (13/14), pp.344-348

Modern Healthcare's 2006 Outsourcing Survey. Originally published in the Oct. 2 2006 issue. 312-649-5231 modernhealthcare.com

Mintzberg, H (1997), Towards Healthier Hospitals, Healthcare Management Review, Volume 22 (4), pp 9-18

Moschuris, S.J. and Kondylis M.N. (2007), Outsourcing in Private Healthcare Organisations: A Greek Perspective, Journal of Health Organization and Management 2007; Volume 21 (2-3), pp. 220-223.

Moy, F. (1995) Facility "Wellness": Health Facilities Management, Facilities Journal, Volume 13 (9/10), pp. 45 - 48

Neuendorf, K.A. (2002) The Content Analysis Guidebook, Sage Publications, First Edition, Thousand Oaks

Okoroh, M.I. *et al* (2001) Adding Value to the Healthcare Sector – A Facilities Management Partnering Arrangement Case Study, Facilities, Volume 19 (3/4), pp 157 - 163

Okoroh, M.I. *et al* (2002) Managing FM (Support Services): Business Risks in the Healthcare Sector, Facilities, Volume 20 (1/2), pp. 41 – 51

Okoroh, M.I. et al (2006) Modelling of Risk Management in Health Care Facilities, Facilities, Volume 24 (5/6), pp 197 - 210

Porter, M.E. *et al* (2006): Redefining Health Care, Harvard Business School Press, 1st Edition, Boston

Prahalad, C. and Hamel, G. (1990), The core competences of the corporation, Harvard Business Review, No. 3, pp. 79-91.

Rogers, P.A. (1999), Optimising Health Care Facilities Management: - Outsourcing Opportunities, BIIA – Healthcare 99, RDT Pacific

Rowley, J. (2002) Using Case Studies in Research, Management Research Ne*ws*, Volume 25(1), pp.16 - 27

Shohet I.M. and Lavy S. (2004) Development of an Integrated Healthcare Facilities Management Model, Facilities Journal, Volume 22 (5/6), pp 129-140

Teece, D.J. (1986), Profiting from technological innovation: implications for integration, collaboration, licensing and public policy, Research Policy, Volume 15, pp. 285-305.

Yigit, G. (2007) Outsourcing and Its Implications for Hospital Organizations in Turkey, Journal of Health Care Finance; Summer 2007, Vol. 33 (4), pp 86 - 92,

APPENDIX A

In support of the assumption that outsourcing has financial as well as non-financial variables, the expected benefits, as cited by Kremic *et al* (2006), are delineated into the two classifications. References are also reproduced indicating substantial credibility.

Table 45: Expected Non-Financial Benefits Sought from Outsourcing, Kremic *et al* (2006)

Expected benefit	References
Quality improvement	Blumberg (1998), Campbell (1995), Champy (1996), Hubbard (1993), Jennings (1997), Jennings (2002),Kakabadse and Kakabadse (2000a), Kriss (1996), Laabs (1993a, b), Lee (1994), McEachern (1996), Mehling(1998), Roberts, V. (2001), Tefft (1998), Willcocks et al. (1995)
Increased speed	Drew (1995), Dubbs (1992), Jennings (1997), Kakabadse and Kakabadse (2000a), Kriss (1996), Krizner (2000), Quinn and Hilmer (1994), Razzaque and Chen (1998)
Greater flexibility	Antonucci et al. (1998), Campbell (1995), Drtina (1994), Gordon and Walsh (1997), Jennings (1997), Jennings (2002), Kakabadse and Kakabadse (2000a, b), Muscato (1998), Quinn and Hilmer (1994), Quinn (1999), Muscato (1998), Razzaque and Chen (1998), Roberts, V. (2001), Tully (1993), Willcocks et al. (1995)
Access to latest technology/ infrastructure	Antonucci et al. (1998), Campbell (1995), Champy (1996), Crone (1992), Drtina (1994), Gordon and Walsh (1997), Kakabadse and Kakabadse (2000a), Lankford and Parsa (1999), McEachern (1996), Mehling (1998), Muscato (1998), Roberts, V. (2001), Wright (2001)
Access to skills and talent	Blumberg (1998), Campbell (1995), Gordon and Walsh (1997), Hill (1994), Hines and Rich (1998), Jennings (1997), Lankford and Parsa (1999), Large (1999), Lawes (1994), Mans (1998), McEachern (1996), Moran (1997), Muscato (1998), Razzaque and Chen (1998), Richardson (1997), Willcocks et al. (1995), Wright (2001)
Augment staff	Burzawa (1994), Gibson (1993), Gilbert (1999), Jennings (1997), Kakabadse and Kakabadse (2000a, b), Large (1999), Lawes (1994), Razzaque and Chen (1998), Richardson (1997), Tefft (1998), Willcocks et al. (1995), Wright (2001)
Increase focus on core functions	Adler (2000), Antonucci (1998), Blumberg (1998), Champy (1996), Crone (1992), Hubbard (1993), Jennings (2002), Kakabadse and Kakabadse (2000a, b), Laabs (1993a, b), Lankford and Parsa (1999), Large (1999), Lawes (1994), Leavy (1996), McIvor and McHugh (2000), Mehling (1998), Moran (1997), Quinn and Hilmer (1994), Roberts, V. (2001), Willcocks et al. (1995), Wolosky (1997), Wright (2001)
Get rid of problem functions	McIvor (2000a), Willcocks and Currie (1997), Willcocks (1995)
Copy competitors	Willcocks and Currie (1997), Willcocks et al. (1995)
Reduce politic pressures or scrutiny	Gordon and Walsh (1997), Hendry (1995), Kakabadse and Kakabadse (2000a), Willcocks and Currie (1997), Willcocks et al. (1995)
Legal compliance	Gordon and Walsh (1997), Kakabadse and Kakabadse (2000a)
Better accountability/management	Domberger and Fernandez (1999), Hubbard (1993), Mehling (1998), Willcocks et al. (1995)

Table 46: Expected Financial Benefits Sought from Outsourcing, Kremic *et al* (2006)

Expected benefit	References
Cost savings	Adler (2000), Antonucci et al. (1998), Champy (1996), Crone (1992), Drtina (1994), Dubbs (1992), Fan (2000),Gordon and Walsh (1997), Hendry (1995), Hubbard (1993), Jennings (2002), Kakabadse and Kakabadse (2000a),Kriss (1996), Krizner (2000), Laabs (1993a, b), Laarhoven et al. (2000), Lankford and Parsa (1999), Large (1999),LaRock (1993), Lawes (1994), Lee (1994), McCray and Clark (999), Mehling (1998), Quinn and Hilmer (1994),Razzaque and Chen (1998), Roberts, V. (2001), Tefft (1998), Tully (1993), Vining and Globerman (1999), Willcocksand Currie (1997), Willcocks et al. (1995)
Reduced capital expenditures	Hubbard (1993), Kakabadse and Kakabadse (2000a), Lawes (1994), McEachern (1996), Muscato (1998),Razzaque and Chen (1998), Tully (1993)
Capital infusion	Blumberg (1998), Gordon and Walsh (1997), McEachern (1996)
Transfer fixed costs to variable	Blumberg (1998), Kakabadse and Kakabadse (2000a), Kelleher (1990), Razzaque and Chen (1998)

APPENDIX B

Table 47: Issues of Outsourcing Relating to Organisations, Harland and Knight (2005)

Benefits/Opportunities	Risks/Disadvantages
Enable focus on core	Failure to identify core and non core may lead to outsourcing core
Reduce costs, providing short-term balance sheet and P&L benefits	Difficulty in in-sourcing later
Increased flexibility to configure resources	Difficulty in deciding how close to core outsourcing should get
Increased ability to meet changing market needs	Lack of skills and competence to manage outsource relationships
Provision of benefit through economies of scale and scope	Increased costs in relationship management
Ability to access best in class skills and capabilities	Lack of understanding, skills and competence to design appropriate service level agreements with outsource company
Freeing of constraints of in-house cultures and attitudes	
Provision of fresh ideas and objective creativity	

Table 48: Issues of Outsourcing Relating to Sectors, Harland and Knight (2005)

Benefits/Opportunities	Risks/Disadvantages
Sectors Provides opportunities for niche players to enter a sector, enabling original sector players to focus on core	Privatisation by stealth
Improvement of products and services from the sector	Reduction of government control over sector
Improved ROI, leading to increased investment in the sector	Creation of powerful outsource companies who gain leverage over a sector
In public sector, policy can be redirected to focus on improvement of services	Possible adverse impact on employment in the sector
	Possible reduced consistency of training and development
	May conflict with some stakeholders' objectives

Table 49: Key Issues of Outsourcing Relating to Nations, Harland and Knight (2005)

Benefits/Opportunities	Risks/Disadvantages
Nations Increased use of world-wide "best in class" capabilities	Possible adverse affect on national employment
Enables national focus on improved services to citizens and taxpayers	Downward pressure on domestic salaries
Improved GNP and employment for nations who become outsource centres of excellence	Mismatch of international cultures, beliefs and traditions
	Risk of foreign control of critical resources and possible subversion
	International exploitation of less developed nations human resources and environment

APPENDIX C

Table 50: Healthcare Partnership Risk Constructs, Okoroh (2002)

	Category	Risk Constructs	
1	Corporate related risks	Environmental Concerns	Clinical Strategy
		NHS Trust Image	Organisational Structure
		Information Strategy	Management Development
		Management Accounting Systems	Social Corporate Responsibility
2	Legal Related risks	Service Level Agreements	Health Statutory Compliance
		National Minimum Wage	Service Contract Design
3	Commercial Related Risks	Business Process Re-eng.	Service Competition
		Stakeholder Involvement	Market Intelligence
		Partnerships	Primary Care Impact
		Third Party involvement	Medical technology Innovation
		Technology Partnerships	
4	Financial and Economic Risks	Return on Capital Employed	Price Competition
		Insurance liability Costs	Service Cost Certainty
		Corporate Business Taxation	Economy
		Provider reimbursement method	Working Capital
		Financial Stability	Profit Margins
5	Business Transfer Risks	Staff Participation	Service Cost Certainty
		Performance Guarantees	Service Innovation
		Business Transfer Costs	Service Availability
		Continuity	
6	Facility Transfer related Risks	Clinical related	Health and safety
		Air Quality	Medical Technology Innovation
7	Customer Care Related Risks	Service quality certainty	Service Value Management
		Medical Technology Innovation	Service Speed
		Consumer Involvement	Service delivery certainty
		Service Measurement	End-user satisfaction

APPENDIX D

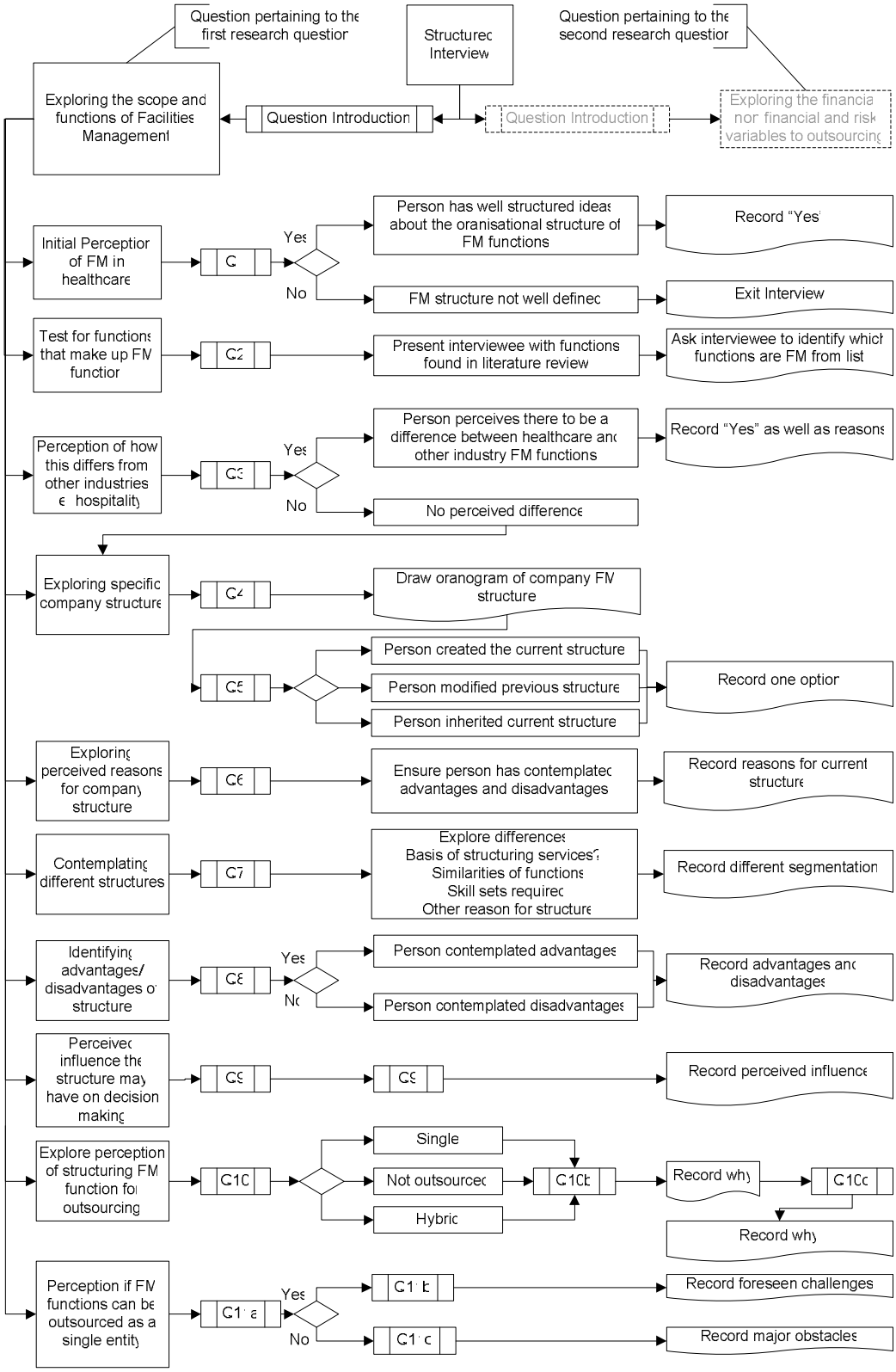


Figure 9: Interview Flow Diagram for Question 1

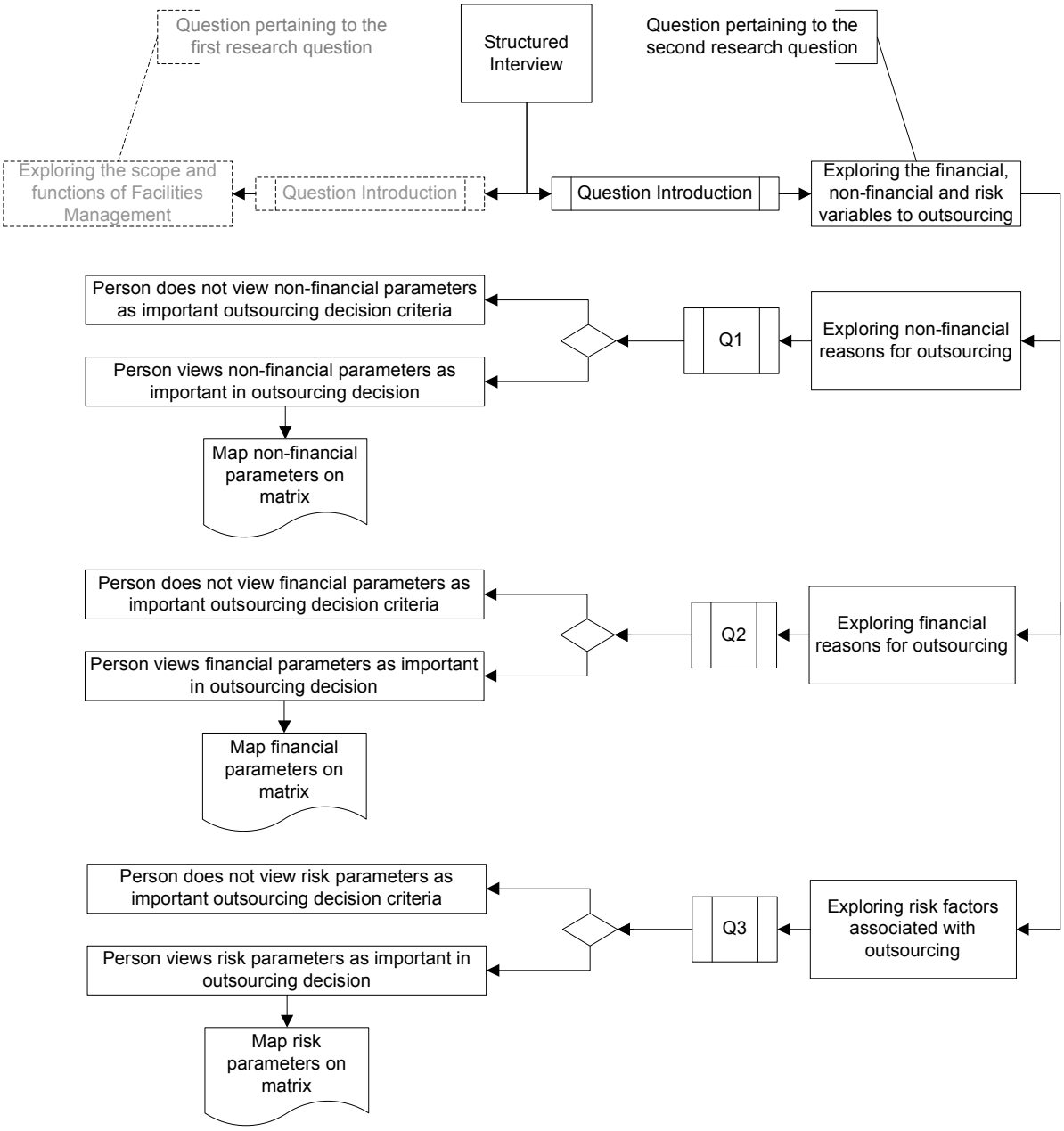


Figure 10: Interview Flow Diagram for Question 2

APPENDIX E

The structured interview question and answer sheet is presented below. Refer to Figures 4 and 5 for logic.

Introduction
Good day, thank you for your time and willingness to engage with this structured interview. We are having these interviews with five industry specialists, you being one of them. This interview is part of my research towards a Masters Degree in Business Administration at the Wits Business School. The title of this research is "Outsourcing of Facilities Management in the Private Healthcare Industry in South Africa". It may come as no surprise that there is no direct literature review on the specific topic and that very little research has been done on the topic internationally. I would like to conduct this interview with you to determine your current thinking on the topic. Being in a decision making position in your organisation, your perception is key to this research and may enable us to interpret the little research that has been done. We would be doing this through recording current industry perspectives.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used		Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	
Formal Job Title	
Duration in this Position	
Company Employed	

Exploring Research Question 1
As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	Question 2	No	Question 3

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	Services	✓
1	Estate Management Services	Maintenance Repairs	
		Energy Management	
2	Environmental Management Service	Environmental Service	
		Fire Safety	
3	Hotel Services	Food and Catering Services	
		Laundry and Linen Services	
4	Site Support Services	Security	
		Telecommunication	
		Portering	
		Accommodation	
5	Business Support Services	Transport	
		Information Technology	
		Purchasing and Supply Service	
6	Space Management support services	Facility Planning	
		Facility Development	
		Space Management	

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	Complete matrix, listing differences	**No**	Proceed to Question 3

1	
2	
3	
4	
5	

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.

Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	Q4a	**Lesser involvement**	Q4b	**Inherited structure**	Q4c

Question 6: Why has the Facilities Management function been designed the way it currently is?

1	
2	
3	

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	
2	
3	
4	

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	
2	
3	

Disadvantages

1	
2	
3	

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function		**Not outsourced**		**Hybrid**	

Question 10b: Why do you think such?

1	
2	
3	

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes	Question 7a	No	Question 7b

Question 11b: If so, what do you foresee you major challenge will be?

1	
2	
3	

Question 11c: If not, what do you foresee as being the major obstacles?

1	
2	
3	

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Yes		No	

Reason

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	Important	Rank
1	Ability to access best in class skills and capabilities		
2	Accelerate re-engineering benefits		
3	Access to latest technology/ infrastructure		
4	Augment staff		
5	Benefit through economies of scale		
6	Better accountability/management		
7	Cash Infusion of assets are sold		
8	Copy competitors		
9	Creates ability to focus on core functions		
10	Decision driven by minimal cost boundary		
11	Flexibility		
12	Freeing constraints of in-house cultures and attitudes		
13	Get rid of problem functions		
14	Greater flexibility		
15	Increased ability to configure resources		
16	Increased ability to meet challenging market needs.		
17	Increased speed		
18	Legal compliance		
19	More efficient exploitation of cutting edge healthcare technology		
20	Provision of fresh ideas and objective creativity		
21	Quality improvement		
22	Reduce political pressures or scrutiny		
23	Reduced costs		
24	Short term balance sheet and P&L benefits		
25	Transfer fixed costs to variable		

Question 13b: Why did you rank the above in this order?

Reason

Question 14: Are there any other benefits you can think of?

Other benefits

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	**Importance**	**Rank**
1	Lack of skills and competence to manage outsource relationships		
2	Increased cost of relationship management		
3	Requirement to develop new decision making processes		
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage		
5	The ability to manage relationships rather than processes		
6	Difficulty to in-source later		
7	Difficulty to decide how close to core to outsource		
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.		

Question 15b: Are there any other risk factors you can think of?

Other risk factors

APPENDIX F

The response from the interview with Mr Vincent MacQueen. The interview was performed on Thursday 10 July 2008 at 13h00.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used	✓	Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	Vincent MacQueen
Formal Job Title	Group Facilities Manager
Duration in this Position	4 years
Company Employed	Community Healthcare

Exploring Research Question 1
As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	Question 2	No	Question 2

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	**Services**	✓
1	Estate Management Services	Maintenance Repairs	✓
		Energy Management	✓
2	Environmental Management Service	Environmental Service	✓
		Fire Safety	✓
3	Hotel Services	Food and Catering Services	✓
		Laundry and Linen Services	✓
4	Site Support Services	Security	✓
		Telecommunication	✓
		Portering	×
		Accommodation	×
5	Business Support Services	Transport	×
		Information Technology	×
		Purchasing and Supply Service	✓

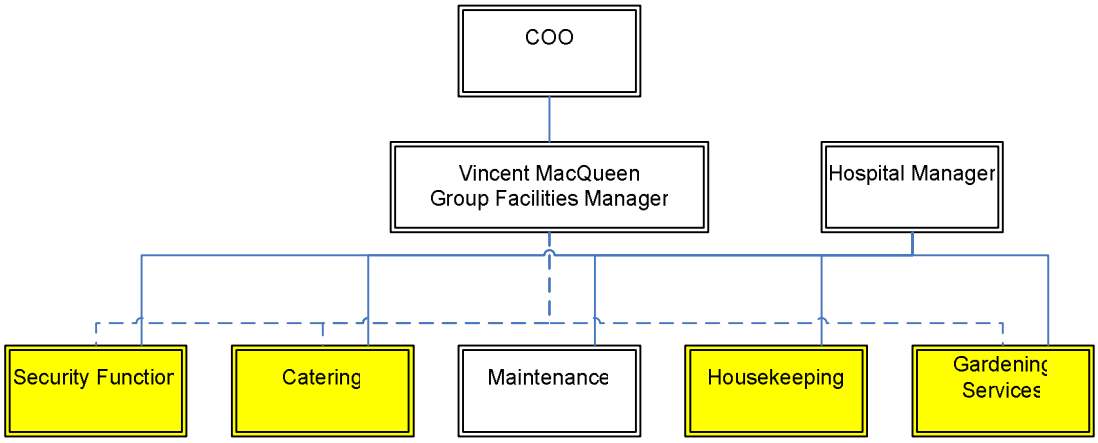
	Service Category	Services	✓
6	Space Management support services	Facility Planning	✓
		Facility Development	✓
		Space Management	✓
	None other indicated		

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	Complete matrix, listing differences	**No**	Proceed to Question 3

1	The fundamental functions are very similar to the hospitality industry, but with an additional highly technical component not normally associated with that industry
2	Private healthcare also differs with public healthcare in South Africa due to management structures. Hard Facilities management is usually managed by the Public Works Department and Soft services are deemed operational and are managed directly from the hospital as part of operations.
3	Facility management in Private Healthcare is more focused due to higher level of skills engaged. There is an apparent skills shortage in the public sector and is has a direct result in an uncoordinated facilities management structure.

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.



Functions in yellow were outsourced. The FM function was very informally structured

Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	Q4a	**Lesser involvement**	Q4b	**Inherited structure**	Q4c

Question 6 Why has the Facilities Management function been designed the way it currently is?

1	It was driven by financial constraints. These constraints did not allow for a formal FM structure
2	Small facilities also did not allow for a formal FM structure as the cost to have persons appointed to manage these functions would not have justified it.

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	No, as the structure was in place by the Respondents, the structure was deemed optimal under the circumstances. Had the group been larger, the structure may have been more formal.

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	A perceived cost saving due to the entire FM function being integrated under one person was identified.
2	The simple structure resolved in little red tape and allowed for quick decision making that made the structure efficient.

Disadvantages

1	The management structure in place in the group made direct line reporting in the FM management function impossible. Due to the hospital manager having direct line reporting from each operational function in the facility, the FM management structure had a dotted line reporting structure at best. Due to a fundamental conflict in business objectives, FM objectives were never aligned with financial objectives.

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	Outsourcing was explored and implemented on a functional basis as opposed as one function. The reason for a function that was outsourced was not clear from the interview.

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function		**Not outsourced**		**Hybrid**	✓

Question 10b: Why do you think such?

1	It was perceived that due to the complexities that exist in healthcare facilities management, no single company has the capacity to successfully offer an integrated outsourcing option. Some functions that are not complex and may be viewed as non-core as well as having a low risk profile, may be outsourced easier than more complex functions. It was also perceived from the interview that if a function could be outsourced successfully, it would be done. In functions where the risks were not known, or where the outsourcing decision was complex, it would not be done.

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes	Question 11b	No	Question 11c

Question 11b: If so, what do you foresee you major challenge will be?

1	It was perceived that no single company has the capacity to successfully offer an outsourcing option.

Question 11c: If not, what do you foresee as being the major obstacles?

1	Not applicable

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Financial, It was perceived that any outsourcing decision would be based purely on financial parameters and only that.

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	**Important**	**Rank**
1	Ability to access best in class skills and capabilities	×	
2	Accelerate re-engineering benefits	×	
3	Access to latest technology/ infrastructure	✓	9
4	Augment staff	✓	8
5	Benefit through economies of scale	✓	3
6	Better accountability/management	×	
7	Cash Infusion of assets are sold	×	
8	Copy competitors	×	
9	Creates ability to focus on core functions	×	

	Decision Variables	Important	Rank
10	Decision driven by minimal cost boundary	×	
11	Flexibility	×	
12	Freeing constraints of in-house cultures and attitudes	×	
13	Get rid of problem functions	✓	7
14	Greater flexibility	×	
15	Increased ability to configure resources	✓	6
16	Increased ability to meet challenging market needs.	✓	5
17	Increased speed	×	
18	Legal compliance	×	
19	More efficient exploitation of cutting edge healthcare technology	✓	4
20	Provision of fresh ideas and objective creativity	×	
21	Quality improvement	✓	2
22	Reduce political pressures or scrutiny	×	
23	Reduced costs	✓	1
24	Short term balance sheet and P&L benefits	×	
25	Transfer fixed costs to variable	×	

Question 13b: Why did you rank the above in this order?

Respondents had the fundamental belief that the cost/service balance is the most critical driver and that two are linked – higher cost gives higher service. The rest of the drivers were not deemed so important.

Question 14: Are there any other benefits you can think of?

None

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	Importance	Rank
1	Lack of skills and competence to manage outsource relationships	✓	3
2	Increased cost of relationship management	✓	4
3	Requirement to develop new decision making processes	✓	8
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	✓	5
5	The ability to manage relationships rather than processes	✓	6
6	Difficulty to in-source later	✓	2
7	Difficulty to decide how close to core to outsource	✓	7
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	✓	1

Question 15b: Are there any other risk factors you can think of?

None, the list was deemed extensive

General Comments by Mr MacQueen

1	Skills are needed to ensure that SLAs are reached rather than management skills. Outsourcing therefore needs different skills sets.
2	It was perceived that no single company in South Africa has the diversity of skills needed to take on a FM outsourcing role for a major healthcare group.
3	It was further perceived that it had not been previously done in South Africa. Many outsourcing companies have tried to sell their service. In all cases, financial drivers were used to justify the decision. Company would estimate a percentage saving on the FM budget at that time and would advise on a “profit sharing scheme”.

APPENDIX G

The response from the interview with Mr Maartin Zimmermann. The interview was performed on Friday 18 July 2008 at 14h00 and continued on Tuesday 22 July at 07h00.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used	✓	Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	Maartin Zimmermann
Formal Job Title	Group Engineering Manager
Duration in this Position	2½ years
Company Employed	Life Healthcare

Exploring Research Question 1

As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	Question 2	No	Question 2

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	**Services**	
1	Estate Management Services	Maintenance Repairs	✓
		Energy Management	✓
2	Environmental Management Service	Environmental Service	✓
		Fire Safety	✓
3	Hotel Services	Food and Catering Services	×
		Laundry and Linen Services	✓
4	Site Support Services	Security	×
		Telecommunication	✓
		Portering	×
		Accommodation	✓
5	Business Support Services	Transport	✓

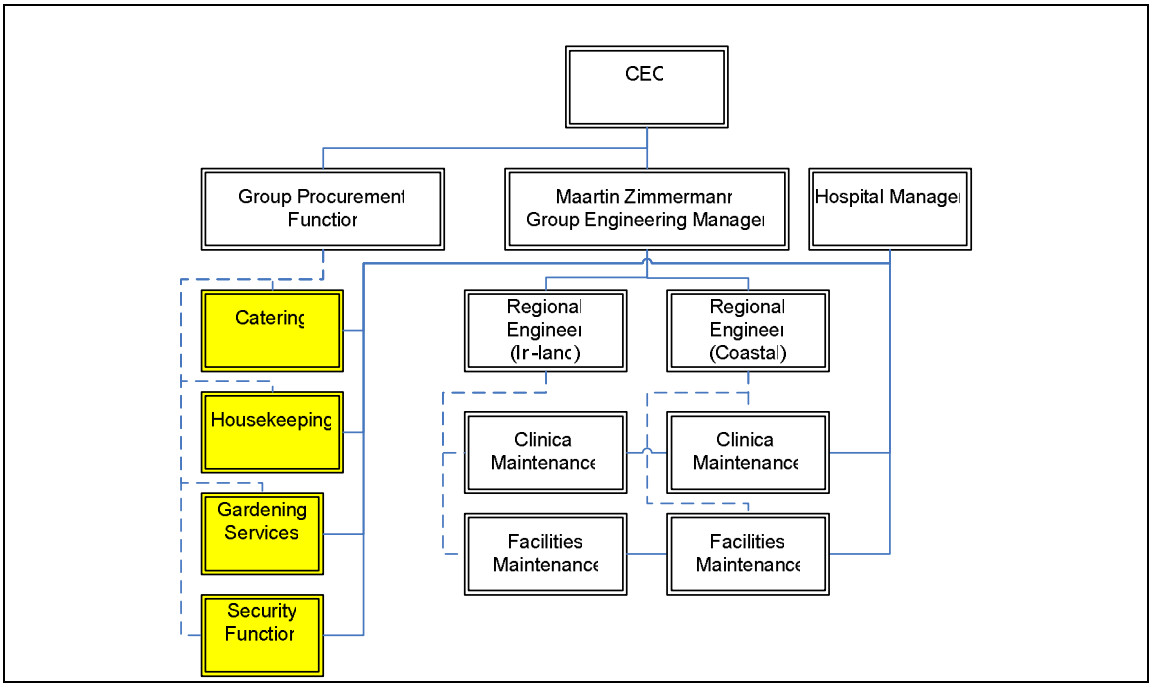
	Service Category	Services	
		Information Technology	×
		Purchasing and Supply Service	×
6	Space Management support services	Facility Planning	✓
		Facility Development	×
		Space Management	×
7	Additional FM Functions	Business Efficiency	✓

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	Complete matrix, listing differences	**No**	Proceed to Question 3

1	The major difference is in the priority of the different functions. In the hospitality industry, that closely resembles the healthcare facility industry, little differentiation is made between the importance of the components of FM functions. In healthcare, it should be recognised that some FM functions relates to life support. One can not afford to be "lacking" in these areas as it directly influences human life. Back-up systems are very important for instance. Aesthetics may in some instances not be as important as functionality of life support functions.
2	Medical-legal perspective very different. In hospitals, one has clients that are already sick, the hospitality industry usually gets healthy clients. This has a profound influence on the client's journey through the facility and requires a slightly different approach to Facility Management.
3	The ability to resolve problems encountered in Facility Management are not easy as the results can be very complex. In healthcare facilities, many systems are interlinked and intervention can have multiple effects.

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.



Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	Q4a	**Lesser involvement**	Q4b	**Inherited structure**	Q4c

Question 6 Why has the Facilities Management function been designed the way it currently is?

1	The implementation of the FM function in this particular organisation was faced with constraints, particularly the availability of skilled people. The structure was therefore created with the aim of being lean and efficient.
2	The structure also made the most sense in terms of executing standardised policies and procedures. It was recognised that efficiency could be obtained through standardisation and was reflected in the structure.
3	A Hospital based direct line reporting structure was already in place. This structure was kept in place due to accountability that needed to be kept with the Business Unit Manager.

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	In the current structure, it was felt that some functions were duplicated or under utilised. By segmenting along functional areas (such as catering, electrical, mechanical) rather than along locations (such as a single facility), further efficiencies can be obtained. It was recognised that there could be barriers (such as logistical issues) for making such a structure work efficiently as well as realising the advantages.

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	The structure is lean-and-mean with little chance of dead wood
2	There was a fundamental belief that the current structure worked well.
3	Systems, such as the asset management systems, could be standardised. Policies and Procedures can be aligned.
3	The structure supported networking for efficient flow of information and business processes.

Disadvantages

1	The lean-and-mean structure made it challenging to cope with unexpected changes such as changes in legislative frameworks.
2	Conflicts may arise due to the matrix reporting structure. It was identified that performance drivers in Facilities Management may not always be aligned with Business drivers.
3	Conflicts arise due a difference in perceived importance of FM related functions.

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	The organisation recently had its laundry outsourced. In the current organisational structure, the operational function at facilities level would identify the business opportunity that outsourcing would bring. This function would then be transferred to the Group Procurement function. The process of outsourcing would be managed by this function.

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function		**Not outsourced**		**Hybrid**	✓

Question 10b: Why do you think such?

1	Specialists in the field of facilities management could do it better due to their specialist knowledge.
2	Some functions are too close to core to outsource
3	Some functions have a high administration burden

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes	Question 11b	No	Question 11c

Question 11b: If so, what do you foresee you major challenge will be?

1	Not applicable

Question 11c: If not, what do you foresee as being the major obstacles?

1	Some functions are very specialist in nature
2	The perceived risk of outsourcing some functions are very high while other functions are less risky.

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Non-financial was perceived to be the most important, but the point was made clear that both financial and non-financial parameters need to make sense before the decision is made.

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	**Important**	**Rank**
1	Ability to access best in class skills and capabilities	✓	14
2	Accelerate re-engineering benefits	✓	15
3	Access to latest technology/ infrastructure	✓	13
4	Augment staff	×	
5	Benefit through economies of scale	✓	16
6	Better accountability/management	✓	6
7	Cash Infusion of assets are sold	×	
8	Copy competitors	×	
9	Creates ability to focus on core functions	✓	7
10	Decision driven by minimal cost boundary	×	
11	Flexibility	✓	5
12	Freeing constraints of in-house cultures and attitudes	×	
13	Get rid of problem functions	×	
14	Greater flexibility	✓	4
15	Increased ability to configure resources	✓	11
16	Increased ability to meet challenging market needs.	✓	10
17	Increased speed	✓	3
18	Legal compliance	✓	1
19	More efficient exploitation of cutting edge healthcare technology	✓	12
20	Provision of fresh ideas and objective creativity	✓	9
21	Quality improvement	✓	2
22	Reduce political pressures or scrutiny	×	
23	Reduced costs	✓	8
24	Short term balance sheet and P&L benefits	×	

25	Transfer fixed costs to variable	×	

Question 13b: Why did you rank the above in this order?

The legal and quality issues around delivering facility management functions were seen as being critical to the decision. Hospitals are about being safe and hence safety is critical.

Question 14: Are there any other benefits you can think of?

Access to local skills could be improved through outsourcing.

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	Importance	Rank
1	Lack of skills and competence to manage outsource relationships	✓	4
2	Increased cost of relationship management	✓	8
3	Requirement to develop new decision making processes	✓	7
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	✓	3
5	The ability to manage relationships rather than processes	✓	6
6	Difficulty to in-source later	✓	2
7	Difficulty to decide how close to core to outsource	✓	5
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	✓	1

Question 15b: Are there any other risk factors you can think of?

1	The stability of the company that the function was outsourced to was important given the economic downturn during the time of the interviews.
2	The ability of the company that was outsourced to, to retain the critical skills it needs to maintain acceptable service levels.

General Comments by Mr Zimmermann

1	There was a fundamental differentiation in the organisation with regards to how typical FM functions are managed. Those functions that were contracted out were managed by the Procurement function as out-sourced functions were regarded as commodities. In-house functions reported within a matrix type management structure. Direct line reporting occurred between functions in each business unit (being a hospital) as well as dotted line reporting within

2	Mr Zimmermann acknowledged that the accountability for functions in a healthcare environment could not be outsourced
3	The need to manage the outsourced entity is very important. Many outsourced functions do not live up to expectation due to improper management.
4	With outsourcing of FM functions, it is important to have an accurate asset management system in place to monitor performance.
5	An SLA needs to be in place to manage the function properly.

APPENDIX H

The response from the interview with Mr Kevin Poggenpoel. The interview was held on Monday 21 July 2008 at 17h00.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used	✓	Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	Kevin D. Poggenpoel
Formal Job Title	Group Engineering Manager
Duration in this Position	6 months
Company Employed	Medi-Clinic Limited

Exploring Research Question 1

As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding as to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	Question 2	No	Question 2

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	**Services**	
1	Estate Management Services	Maintenance Repairs	✓
		Energy Management	✓
2	Environmental Management Service	Environmental Service	×
		Fire Safety	✓
3	Hotel Services	Food and Catering Services	✓
		Laundry and Linen Services	✓
4	Site Support Services	Security	✓
		Telecommunication	✓
		Portering	×
		Accommodation	✓
5	Business Support Services	Transport	×
		Information Technology	×

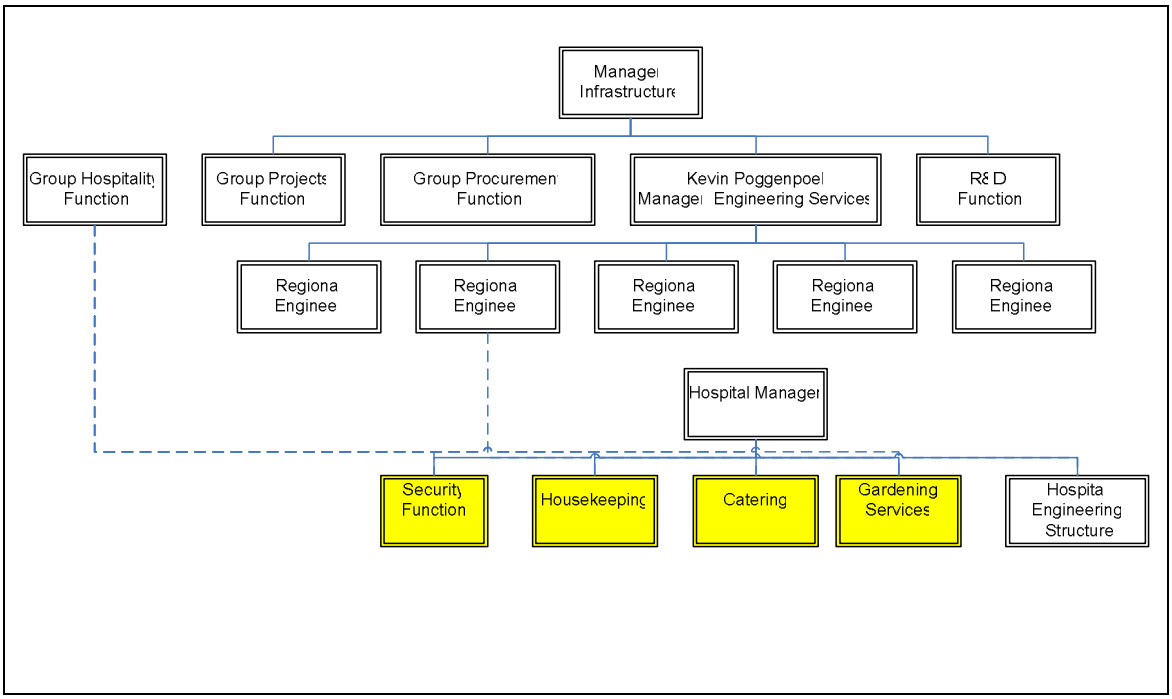
		Purchasing and Supply Service	×
6	Space Management support services	Facility Planning	✓
		Facility Development	✓
		Space Management	✓
7	Additional FM Functions	Resource Management	✓

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	Complete matrix, listing differences	**No**	Proceed to Question 3

1	The major difference is that healthcare Facilities Management includes life critical functions. Other industries such as hospitality may not have systems that support life.
2	Due to above, the required urgency may not be the same as is required in other industries.
3	In the leisure industry, the focus on Facilities Management functions is more on aesthetics (look and feel). In private healthcare, it is about look, feel as well as the critical nature of the systems.
4	Given the complexity of systems, a different skill set is needed to manage the FM function. Technical skill as well as passion is required. Many people that have engaged in private healthcare facilities functions have failed due to a lack of this passion.

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.



Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	Q4a	**Lesser involvement**	Q4b	**Inherited structure**	Q4c

Question 6 Why has the Facilities Management function been designed the way it currently is?

1	The previous Facilities Management Structure did not cater for the growth that the organisation experienced in recent years. It was felt that top management was getting intimately involved in all facilities and had a serious impact on their efficiency. The current structure was designed to diversify decision making.
2	The FM functionality was designed due to the experience gained previously in the Group.
3	The business executive created four main functions that they viewed as core. Each core area manager could then shape that part of the business to deliver set outputs.

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	Easy to box and delineate along functional areas, but it was found that this did not suit the organisation.

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	The four core areas performed as one team rather than silos.
2	Much synergy was obtained through a team effort.

Disadvantages

1	None could be identified

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	The current structure lends itself well to outsourcing selected functions. These functions are grouped under the “Hospitality” function. As soon as an outsourcable function is identified, it is moved to this function for appropriate management.

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function		**Not outsourced**		**Hybrid**	✓

Question 10b: Why do you think such?

1	Due to the complexity of some of the FM Functions
2	To diversify the risk of outsourcing

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes	Question 11b	No	Question 11c

Question 11b: If so, what do you foresee you major challenge will be?

1	Not applicable

Question 11c: If not, what do you foresee as being the major obstacles?

1	The organisation has tried – it was that the outsourced company was in it purely for profit
2	It was perceived that no company would have the required skill set to successfully do this.
3	The quality of people would be worse than what is required
4	Employees of outsourced company has absolutely no loyalty to the parent company

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Non-financial

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	**Important**	**Rank**
1	Ability to access best in class skills and capabilities	✓	8
2	Accelerate re-engineering benefits	✓	5
3	Access to latest technology/ infrastructure	×	
4	Augment staff	✓	7
5	Benefit through economies of scale	✓	6
6	Better accountability/management	×	
7	Cash Infusion of assets are sold	×	
8	Copy competitors	×	
9	Creates ability to focus on core functions	×	
10	Decision driven by minimal cost boundary	×	

11	Flexibility	×	
12	Freeing constraints of in-house cultures and attitudes	✓	4
13	Get rid of problem functions	✓	12
14	Greater flexibility	×	
15	Increased ability to configure resources	✓	3
16	Increased ability to meet challenging market needs.	✓	10
17	Increased speed	×	
18	Legal compliance	✓	9
19	More efficient exploitation of cutting edge healthcare technology	✓	11
20	Provision of fresh ideas and objective creativity	✓	2
21	Quality improvement	✓	1
22	Reduce political pressures or scrutiny	×	
23	Reduced costs	×	
24	Short term balance sheet and P&L benefits	×	
25	Transfer fixed costs to variable	×	

Question 13b: Why did you rank the above in this order?

The quality of the service that is to be provided was deemed to be the overriding factor.

Question 14: Are there any other benefits you can think of?

None was put forward

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	**Importance**	**Rank**
1	Lack of skills and competence to manage outsource relationships	✓	7
2	Increased cost of relationship management	✓	8
3	Requirement to develop new decision making processes	✓	6
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	✓	1
5	The ability to manage relationships rather than processes	✓	5
6	Difficulty to in-source later	✓	3
7	Difficulty to decide how close to core to outsource	✓	4
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	✓	2

Question 15b: Are there any other risk factors you can think of?

None was mentioned

General Comments by Mr Poggenpoel

1	It was commented that the American healthcare system seems to write computer software applications to manage FM functions.
2	It was put forward that all functions in a hospital are core. A hospital can not deliver a service efficiently if one of the functions is not functioning. The example that was cited that if laundry does not produce linen of the required quality, the patient can be accommodated in a bed.
3	The notion of synergies was also discussed. Synergies between functions can usually not be measured and could easily be forgotten when assessing the appropriateness of the outsourced decision.
4	The real long term cost of outsourced functions not performing could creep up over a long time.
5	Patients rarely complain about the services of the doctors, They usually complain about soft issues such cold food, Dirty or soiled linen or that the closet maid did not clean properly. This is what they share with others and so the facility gets a bad name not the company performing the function.

APPENDIX I

The response from the interview with Mr Charlie de Wet. The interview was held on Friday 25 July 2008 at 13h00-15h15.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used	✓	Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	Charlie de Wet
Formal Job Title	Regional Technical Manager: Coastal
Duration in this Position	3 Years
Company Employed	Netcare Limited

Exploring Research Question 1

As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	Question 2	No	Question 2

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	**Services**	
1	Estate Management Services	Maintenance Repairs	✓
		Energy Management	✓
2	Environmental Management Service	Environmental Service	✓
		Fire Safety	✓
3	Hotel Services	Food and Catering Services	✓
		Laundry and Linen Services	✓
4	Site Support Services	Security	×
		Telecommunication	✓
		Portering	×
		Accommodation	×
5	Business Support Services	Transport	×
		Information Technology	×

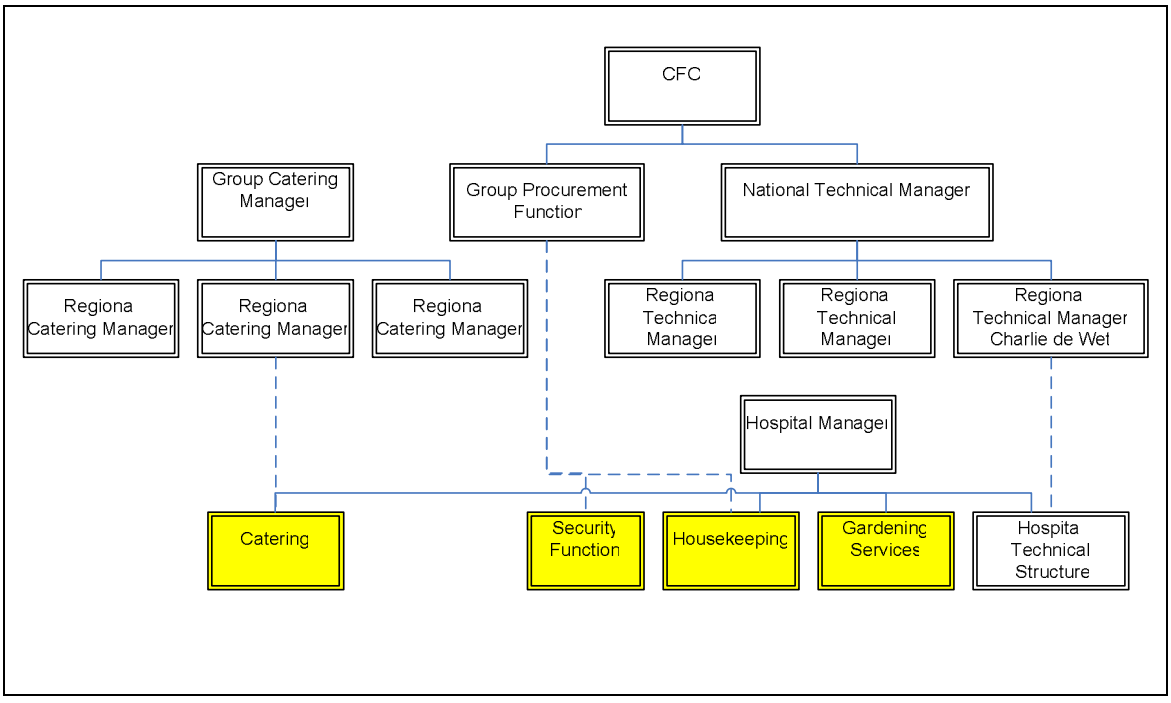
		Purchasing and Supply Service	✗
6	Space Management support services	Facility Planning	✓
		Facility Development	✓
		Space Management	✓
7	No additional functions identified		

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	Complete matrix, listing differences	**No**	Proceed to Question 3

1	The above answer was substantiated by explaining that the services are the same – hospital and hotel air-conditioning are essentially the same. However, the details are very different. The impact of certain FM functions failing in a hospital has a far bigger impact; hence its relevance importance to the business is far greater.

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.



Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	Q4a	**Lesser involvement**	Q4b	**Inherited structure**	Q4c

Question 6 Why has the Facilities Management function been designed the way it currently is?

1	Strong individuals in the organisation built silo structures around themselves
2	Nobody has designed the FM function at a macro level.
3	The structure is in the process of evolution, as happens with all companies that continually grows, as is the case in Netcare.

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	Facilities of the same size should be grouped together and structures should be designed around it. One structure for all sizes of facilities does not work.

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	People and skills can be efficiently moved between facilities.
2	Good organisational order is created with the current structure.
3	Efficient alignment of the organisation is possible through Policies and Procedures.
4	The structure allows for tailoring to suit changing business environment.

Disadvantages

1	A power struggle is possible between FM functions

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	The structure was seen as aiding the outsourcing process. National level negotiations can be done easily; access to economics of scale is possible. The structure was also perceived to be very flexible and could easily be re-engineered to suit a different reporting structure. Unfortunately the structure is not aligned from top to bottom – certain discontinuities could make buy-in of the process difficult. Unfortunately the effect of external role-players can not be taken into account – professionals such as surgeons may be influenced by the decision but due to the nature of the relationship in South African between clinical professionals and the healthcare group, this would always remain difficult to manage.

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function		**Not outsourced**		**Hybrid**	✓

Question 10b: Why do you think such?

1	Some FM functions are just to complex to outsource
2	The economic decision variables that would drive an outsourcing decision, is not consistent for the functions inside Facilities Management

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes	Question 11b	No	Question 11c

Question 11b: If so, what do you foresee you major challenge will be?

1	Too complex to outsource as there is no single company in South Africa that could successfully manage such complexity.

Question 11c: If not, what do you foresee as being the major obstacles?

1	Not applicable

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Non-financial, some items are critical, no matter what the cost is. In private healthcare, it was perceived that quality of a service is most critical

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	**Important**	**Rank**
1	Ability to access best in class skills and capabilities	✓	11
2	Accelerate re-engineering benefits	✓	10
3	Access to latest technology/ infrastructure	✓	12
4	Augment staff	×	
5	Benefit through economies of scale	✓	9
6	Better accountability/management	✓	8
7	Cash Infusion of assets are sold	×	
8	Copy competitors	×	
9	Creates ability to focus on core functions	✓	7
10	Decision driven by minimal cost boundary	✓	13
11	Flexibility	✓	6
12	Freeing constraints of in-house cultures and attitudes	×	
13	Get rid of problem functions	×	
14	Greater flexibility	✓	4
15	Increased ability to configure resources	✓	5
16	Increased ability to meet challenging market needs.	×	

17	Increased speed	×	
18	Legal compliance	✓	3
19	More efficient exploitation of cutting edge healthcare technology	×	
20	Provision of fresh ideas and objective creativity	✓	14
21	Quality improvement	✓	1
22	Reduce political pressures or scrutiny	×	
23	Reduced costs	✓	2
24	Short term balance sheet and P&L benefits	×	
25	Transfer fixed costs to variable	×	

Question 13b: Why did you rank the above in this order?

Quality is non-negotiable. The fundamental business driver – that of cost effectiveness – needs to make sense inevitably, one should not be concerned about that at all, it is about the other drivers.

Question 14: Are there any other benefits you can think of?

None

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	**Importance**	**Rank**
1	Lack of skills and competence to manage outsource relationships	✓	4
2	Increased cost of relationship management		
3	Requirement to develop new decision making processes	✓	3
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	✓	1
5	The ability to manage relationships rather than processes		
6	Difficulty to in-source later		
7	Difficulty to decide how close to core to outsource	✓	2
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.		

Question 15b: Are there any other risk factors you can think of?

The company's track record could be false. There is a risk that the due diligence that was done on the prospecting partner could be incorrect or misleading.

General Comments by Mr de Wet

1	The ultimate driver of a company's structure should be to minimise cost.

APPENDIX J

The response from the interview with Mr William Osburn. The interview was held on Saturday 2 August 2008 at 10h30.

Demographic Information

Would you object that this information may be used for academic purposes?

No, does not object to the information being used	✓	Yes, does object to the information being used	

For recording purposes, please state your name, formal job title, the time you have held this position and the company you are employed by.

Name:	William Osburn
Formal Job Title	Hospital Manager
Duration in this Position	1 Year
Company Employed	Clinix Holdings

Exploring Research Question 1

As mentioned, the research is about the outsourcing of Facilities Management in Private Healthcare in this country. Literature indicates that there seems to be a misunderstanding to what Facilities Management entails. We would like to begin by exploring what Facilities Management means.

Question 1: Are you familiar with the term Facilities Management?

Yes	✓	No	

Question 2: What functions, in your experience, makes up that of Facilities Management in your organisation?

	Service Category	**Services**	
1	Estate Management Services	Maintenance Repairs	✓
		Energy Management	✓
2	Environmental Management Service	Environmental Service	✓
		Fire Safety	✓
3	Hotel Services	Food and Catering Services	✓
		Laundry and Linen Services	✓
4	Site Support Services	Security	✓
		Telecommunication	×
		Portering	×
		Accommodation	×
5	Business Support Services	Transport	✓
		Information Technology	×
		Purchasing and Supply Service	×

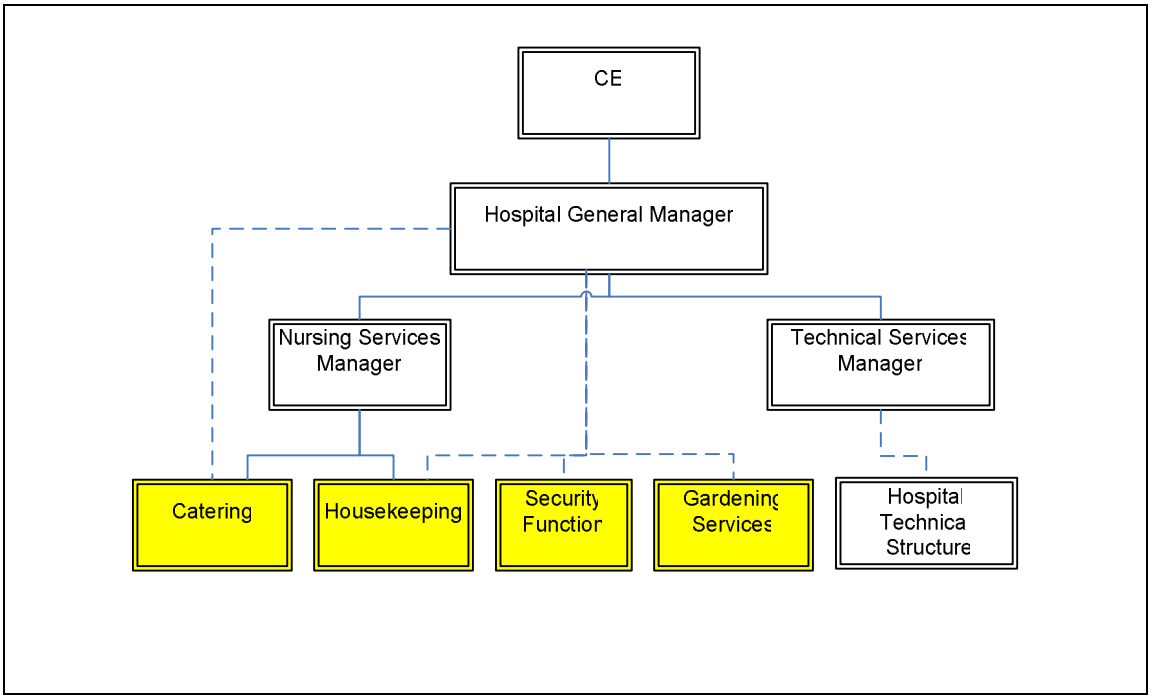
6	Space Management support services	Facility Planning	✓
		Facility Development	×
		Space Management	×
7	No additional functions identified		

Question 3: Does Facility Management differ between Private Healthcare and other industries and if so, how would Facilities Management differ?

Yes	✓	**No**	

1	Facilities Management was deemed to be more complex in the healthcare environment. More hands-on is required as some functions are supporting life.
2	A link between some functions was also raised, i.e. clinical equipment and plant maintenance.

Question 4: Through the use of an organogram, please explain how Facilities Management is managed in your organisation.



Question 5: To what degree have you been part of creating/shaping the Facilities Management function in your organisation?

Personally shaped	✓	**Lesser involvement**		**Inherited structure**	

Question 6 Why has the Facilities Management function been designed the way it currently is?

1	There was a fundamental understanding how interconnected Facilities Management was; It was shaped with tiered reporting into the Hospital Manager to ensure such interconnection remained functional.
2	A restriction on the appointment of additional manpower prohibited an optimal structure to be designed. The FM function was distributed between management already in place.

Question 7: Could you think of any other basis of segmenting Facilities Management?

1	The structure should be aligned to function as well as business unit.

Question 8: Could you identify some of the advantages and disadvantages of the structure as implemented in your organisation?

Advantages

1	Facilities Management cost is relatively low due to small hospital based staffing structure
2	Decision making is very quick as very little red tape exists. This is in part possible due to relative small size of the Clinix group

Disadvantages

1	No uniformity exists in Facilities Management.
2	No support for the generation of aligned Policies and Procedures from the Group – each facility is doing its own thing.
3	No fall-back position for Facilities Management

Question 9: To what a degree will the current organisational structure influence the decision making process to outsource Facilities Management?

1	The structure does not allow for aligned decision making – decision making is fragmented
2	Facility Management is not outsourced as a unit that may have led to benefits not realised due to economies of scale.

Question 10a: Should Facilities management function be outsourced as a single function, should no FM functions be outsourced or would a hybrid model of outsourcing and in-house functions be more appropriate?

Single Function	✓	**Not outsourced**		**Hybrid**	

Question 10b: Why do you think such?

1	The correct management of the Facilities Management should be left to a single expert to ensure objectivity as the individual hospital can not have such objectivity.

Question 11a: Do you foresee that Facilities Management can be successfully outsourced as one entity in Private Healthcare in South Africa?

Yes		No	✓

Question 11b: If so, what do you foresee you major challenge will be?

1	

Question 11c: If not, what do you foresee as being the major obstacles?

1	That the output of the outsourced function is not aligned with wider business objectives. The SLA needs to be accurate to attain this.

Exploring Research Question 2

Question 12: Just as an initial benchmark, do you perceive financial or non-financial parameters more important in the outsourcing decision and why?

Financial, the point was made that both should be considered, but due to the business cycle that the hospital found itself in over the past few years, the emphasis was to reduce the operational costs, hence this was the primary objective.

Question 13a: Please rank the following outsourcing decision variables in order of importance:

	Decision Variables	Important	Rank
1	Ability to access best in class skills and capabilities	✓	3
2	Accelerate re-engineering benefits	✓	14
3	Access to latest technology/ infrastructure	✓	8
4	Augment staff	×	
5	Benefit through economies of scale	✓	13
6	Better accountability/management	✓	2
7	Cash Infusion of assets are sold	×	
8	Copy competitors	×	
9	Creates ability to focus on core functions	✓	7
10	Decision driven by minimal cost boundary	✓	16
11	Flexibility	✓	15
12	Freeing constraints of in-house cultures and attitudes	✓	4
13	Get rid of problem functions	✓	18
14	Greater flexibility	×	
15	Increased ability to configure resources	✓	17

16	Increased ability to meet challenging market needs.	✓	1
17	Increased speed	✓	9
18	Legal compliance	✓	10
19	More efficient exploitation of cutting edge healthcare technology	✓	11
20	Provision of fresh ideas and objective creativity	✓	6
21	Quality improvement	✓	5
22	Reduce political pressures or scrutiny	×	
23	Reduced costs	✓	12
24	Short term balance sheet and P&L benefits	×	
25	Transfer fixed costs to variable	×	

Question 13b: Why did you rank the above in this order?

The facility needed to re-gain market confidence and market share. This was the main objective that would also drive the decision process.

Question 14: Are there any other benefits you can think of?

None

Question 15a: Please rank the following Risk factors in order of most important to least important to your organisation.

	Risk Factors	**Importance**	**Rank**
1	Lack of skills and competence to manage outsource relationships	×	
2	Increased cost of relationship management	✓	3
3	Requirement to develop new decision making processes	×	
4	Failure to identify core and non-core may lead to outsourcing core functions that may impact on competitive advantage	✓	1
5	The ability to manage relationships rather than processes	×	
6	Difficulty to in-source later	×	
7	Difficulty to decide how close to core to outsource	✓	2
8	Lack of understanding, skills and competence to design appropriate service level agreements with the outsourcing company.	✓	4

Question 15b: Are there any other risk factors you can think of?

The outsourcing company does not attach the same urgency to matters as would staff in a healthcare facility.

APPENDIX K

A consistency matrix is a powerful tool in assisting with the alignment of the sub-problems, research questions, the sources of theory that gave rise to the research questions, the sources of data that will be used to answer the research questions and the subsequent data analysis. It ensures the stated problem is addressed comprehensively. The consistency matrix for this research is shown on the next page.

Table 51: Consistency Matrix

Research problem stated here					
Sub-problem	**Propositions**	**Source of theory**	**Source of data**	**Type of data**	**Analysis**
To define the scope and functions of "Facilities Management" in the South African private healthcare environment and to search for similarities that would group functions together with the objective of simplifying the outsourcing decision.	That Facilities Management, managed typically as a singular management function in other industries, should not be managed as an integrated function in the South African Private Healthcare environment due to the specialist and diverse nature of some of its services.	Moy (1995), Al-Zubaidi (1997), McLennan (2004), Shohet (2004), Kremic *et al* (2006), Porter (2006).	Structured interview with industry experts	FM structures in block diagram form	Identification of consistent trends by experts, Single iteration.
The identification of financial and non-financial variables as well as risks that will aid in the decision making process to determine whether or not to outsource the above "Facility Management" functions	Non-financial drivers of the outsourcing decision are more significant than financial drivers in the decision to outsource FM functions and that the total risk of outsourcing FM can be mitigated by employing separate outsourcing strategies for the different FM functions in private healthcare in South Africa.	Kremic *et al* (2006), Kakabadse and Kakabadse (2000), Yigit (2007), Hamad (2007), Goodsell (2007), Moschuris (2007), Guy (2007). Okoroh (2002)	Structured interview with industry experts. Ranking al list of drivers and risks per EMail	Literature summary of current practices as well as a ranking of risk perceptions	Descriptive discussion of the perceived drivers and risks.