



- RESEARCH REPORT -

TITLE

The Relationship between Neighbourhood Preferences, Building Attributes and
Location of Office Property Portfolios in Pretoria

by

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DECLARATION

I, Mathemba Mosery, declare that this research report is my own, unaided work. This report is being submitted for the Degree of Masters in Building (Property Development and Management) at the University of the Witwatersrand, Johannesburg, South Africa. It has not been submitted before for any degree or examination at any other University.

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(Signature of Candidate)

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ABSTRACT

Purpose – This study set out to investigate whether neighbourhood preferences and building attributes have a relationship with business and firm office location decisions. The investigation had a particular focus on a predominantly government-owned administrative city, Pretoria Metro, and on private-sector property market decision making with regard to relocations, redevelopments, investments and their profiles.

Method – This study used a survey method, with a multilevel questionnaire comprising a Likert Scale for neighbourhood preferences, safety, social, functionality and physicality; and building attributes, presentation, management, functionality, services, accessibility and amenities; and selecting the preferred precinct among the categories “prestige”, “historic”, “heritage” and “government”. The questionnaires were sent to real-estate practitioners.

Findings – Safety, with a mean score of 1.83, was the most important factor and functionality, with a mean score of 2.36, was the least important factor for neighbourhood preference. Management, with a mean score of 1.72, was the most important factor and amenities, with a mean score of 2.74, was the least important factor for building attributes. All factors were generally important with mean scores ranging between 1.58 and 2.63 for neighbourhood preferences, and 1.29 and 3.25 for all building attributes. The majority of businesses (67%) would not prefer to locate within the Pretoria CBD. The most preferred precinct that the businesses would prefer to locate near or within was prestige, followed by government and historic, with heritage being the least preferred. The results for the relationship between neighbourhood preferences, at 0.52, building attributes, at 0.63, and the office location choice are both positive and strong.

Implications/Value – Efforts to attract businesses back to the Pretoria CBD based on neighbourhood preference should focus on maintaining the area, making the area safe for property and persons and dealing with the traffic nuisance. With regard to building attributes emphasis should be on providing good management of the building and improving external and internal finishes of the buildings.

Keywords: *Building attributes, corporate real estate, neighbourhood preference, office location decision, Pretoria*

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CHAPTER 1 – INTRODUCTION

1.1 BACKGROUND TO THE STUDY

A number of significant decisions are made daily by participants in the real estate industry about their business and firm location. These location choices require decisions about neighbourhood choice and in particular building choices (Des Rosiers et al., 2000; Hess and Liang, 2003; Ho et al., 2005; Nappi-Choulet and Decamps, 2013). This study is centred on the office building sector in the Pretoria Metro.

Office buildings are a place of work, a way to market a firm and a significant financial investment. As a consequence, the neighbourhood a firm chooses and the specific building where it locates itself becomes very important (Leishman et al., 2011; Jackson and Or, 2011).

Individuals and firms take decisions about the location of their businesses in order to enhance their competitive advantage and transform their structure and image (Roulac et al., 2003). These decisions about locating in certain neighbourhoods, and in particular buildings, are at the core of corporate real estate (CRE), and have an impact on the businesses' future revenue and costs, and on their corporate mission (Manning, Rodriguez and Ghosh, 1999; Rabianski, DeLisle and Carn, 2001). However, these decisions are not only influenced by the individuals, but are also an integral part of institutional investment activity and decision making, and are phenomena of the economics of location (Leishman and Watkins, 2004; Guy, Henneberry and Rowley, 2002; Healey, 1995; Kilkenny and Thisse, 1998).

Cities in Africa will grow to accommodate one billion residents by 2050 ("African Cities 2063", 2015). To support the infrastructure developments that will be required in a sustainable manner a substantial tax base will have to be built to cater for and fund this growth. Pretoria is an administrative capital and also houses private sector businesses and firms. What is unknown is which factors determine private sector firms' decisions to locate in particular neighbourhoods in the Pretoria Metro and in which specific buildings, and what determines office space choice and corporate image (Sing et al., 2006; Skevin, 2011). To this end cities, in this study Pretoria Metro, will have to attract substantially sized businesses and firms to the CBDs and keep them there. They must embark on regeneration programmes that take into account the issues of smart cities, climate change and sustainable development (Guy, Henneberry and Rowley, 2002; Korthals Altes, 2002).

At some point in the life of a city, in particular the CBD, there are cyclical developments that participants in the real estate industry should look at closely and provide solutions to. In some instances the CBD enjoys a time of growth followed by stagnation and a decline in activity (Korthals Altes, 2002; Guy and Henneberry, 2000). In these instances the institutional investors will, to a large extent, control the nature of the developments and the direction of investments away from the CBD or back to the CBD, as is the case in Pretoria. Major office space investments, in the recent past, have been away from the CBD. A few nodes in the periphery have been the recipients, Menlyn, Brooklyn, Centurion and Lynwood being the most important of these investments.

Research has suggested that firms chose to agglomerate in centres that offer comparative location advantages, labour, transport and convenient contacts (Sing et al., 2006). In office location choice there are a number of determinants and factors that have been identified by researchers over the years. The principal factors pertaining to neighbourhood preferences and building attributes are:

- location attributes (public transport and major transportation grid, adequate parking, safety, cleanliness, near competitors, culture and history);
- service attributes (public meeting rooms, restaurant, reception service, health service, dry cleaning, beauty care);
- building attributes (air conditioning, lighting, elevator, shower, energy efficiency, open double volume, other players' competition); and
- work space attributes (space layout, efficiency and effectiveness).

These have necessitated an urgent need for institutional investors, developers, agents, designers, policy developers and occupiers to have a clear and focused understanding of potential occupier requirements and needs in order to achieve success in changing the business environment (Luoma et al., 2010).

The recent move away from the Pretoria CBD by firms relocating following the rise of the suburban employment centres (“edge city”) has seen the decline of the CBD. While suburban nucleation has increased, the relative importance of the CBD has also been diminished (Erickson 1986). Also, as the city centre grows to critical size, the agglomeration benefits of the centre diminish as a result of growing costs of traffic congestion and increased office density; moreover, the formation of these sub-centres with their own economic activities has led to core centre decline (Richardson 1988; Sing et al., 2006). Even though this has happened, the suburban still needs and depends on the city centre (Button, 1998). City growths are natural and their negative consequences can be mitigated and reversed. This leads to the question: What can reverse these consequences? Thus identifying, understanding and applying the factors and attributes that firms require of the city neighbourhoods and buildings will cause some firms to remain, some to be replaced and some to relocate to the city centre.

While the traditional theories are plausible in explaining these phenomena and sometimes the unintended outcomes of movements from and to the CBDs (relocations and what needs to be arranged to reverse these), the situation in South Africa, and in particular Pretoria, is to a certain degree different from the traditional phenomena. This is attributable to the structure and patterns of property assets in the country, the office market in particular, and also institutional investors' preferences and their investment preferences between CBD and suburban offices, and of tenants' profile and make-up, owing to the apartheid history of South Africa. Advancing investigation of what is to be addressed to balance these and by some means create the reverse effect and attract them back is the crux of this research paper. This will create a new urban spatial equilibrium in the CBD which has to do with determining and identifying the factors that make neighbourhoods and buildings great (Vandell and Lane, 1989; Baum, 1993).

1.3 AIM/PURPOSE

This study sets out to investigate how neighbourhood preferences and building attributes influence business and firm office location decisions.

The investigation particularly focuses on Pretoria Metro, a predominantly government-owned administrative city, and its relative importance in the private sector property market decision making with regard to relocations, redevelopments, investments and their profiles. Prestige, historic and heritage dimensions are factors taken into account in the order of preference of these dimensions, to further determine new precincts within the CBD node.

In the case of Pretoria Metro the study identifies those dimensions that enable real-estate participants to understand the factors that will encourage businesses and firms to prefer a location in the CBD. These in turn will have positive contribution on raising the firms' profile and structure within the Pretoria Metro, in that this will attract bigger and better businesses and firms.

1.4 CONTRIBUTION/SIGNIFICANCE

This study will make a contribution in that the variables of the construct of neighbourhood and building choices will be tested in a different and unique context of a capital city that is predominantly governmental, focusing on executive and administrative functions. Secondly, it extends to other dimensions and adds new routes in the construct of eliciting the preferences for particular nodes within the CBD. Further,

it will provide useful insights to decision makers within the commercial property industry space, in particular the office sector in Pretoria.

The use of a multilevel survey questionnaire design method, explained under data collection, comprising a Likert Scale for Neighbourhood Preferences and Building Attributes and analysis for ranking the precincts is also a novelty (Ho, Newell and Walker, 2005; Leby and Hashim, 2010; Aluko, 2011).

This study is significant in the current context where cities are merging in Gauteng between Johannesburg, Pretoria and Ekurhuleni, opening up new nodes at the periphery, which provide new and smart working places compared to the old CBDs. This rivalry makes an interesting foundation for these studies in the South African context.

The implications of these movements are also significant for practitioners and professionals in the property industry, from policy frameworks for policy makers and investors, to development strategies for developers and financing structures for investors.

1.5 RESEARCH QUESTIONS

This study seeks to examine office location decision criteria within and among private sector firms in terms of their firms' location decisions with regard to neighbourhood choice (preferences) and building choice (attributes).

In order to achieve the objectives set for this study, the following questions are addressed:

- What is the relative importance of neighbourhood preferences and building attributes in Pretoria?
- What is the relationship between neighbourhood preferences, building attributes and office location choice?

These core questions are topical and relevant, since like most other major city CBDs in South Africa, Pretoria CBD has slowed down drastically in terms of new development or redevelopment of office space, and as a result firms are moving out of the CBD to suburban nodes because of new office developments in those areas.

1.6 THE OBJECTIVES

The study objectives are:

- To determine the relative importance of neighbourhood preferences and building attributes in Pretoria; and
- To determine the relationship between neighbourhood preferences, building attributes and office location choice.

1.7 THE CONTEXT

The study was conducted in the Pretoria Metro office sector, specifically the CBD. Pretoria is the administrative capital of the Republic of South Africa and it houses its executive and administration and it predominantly comprises low- to high-rise office buildings. Pretoria CBD is bound by Proes Street in the northwest, Madiba Street in the east, Visagie Street in the south and DF Malan Street in the west. The CBD houses historical, prestige, heritage and iconic buildings and sites such as the Union Buildings, South African Reserve Bank, Kruger Square, Kruger Memorial, Freedom Park and the Voortrekker Monument. Amenities include the University of South Africa, the National Library, National Museum and the National Zoo (see Figure 1.2).

Figure 1.2: Pretoria CBD



The major owner and occupier of office space in Pretoria is the government at all three levels (national, provincial and local). At the national level, the national Department of Public Works is the landlord, and has under its custodianship, nationally, about 110,000 land parcels with an average of 2.5 buildings per land parcel. Of these, Pretoria Metro accounts for several thousand (taking into account all spheres – national, provincial and local, excluding institutions), and of that Pretoria CBD accounts for 330 land parcels of government property under the custodianship of the National Department of Public Works with an average of 4.5 buildings per land parcel (low- and high-rise offices). In addition, national government leases 310 buildings with over 2.0 million square meters and about R100 million per month rent (IPD 2015; RODE report, 2015; Hess and Liang, 2003) (see Figure 1.3).

Figure 1.3: Pretoria CBD Proposed Office Development



1.8 LIMITATIONS

Due to time constraints the researcher could not reach as many participants as was desired; therefore, the sample cannot be generalised with much confidence. Also, due to time constraints, sampling over time could not be done, which would have refined the study more, as testing over a time span can provide time series insight.

1.9 THE STRUCTURE OF THE REPORT

The report is structured as follows. Chapter 2 is a background and literature review, which comprises first the conceptual framework, explained according to the various dimensions, perceived importance of neighbourhood and building factors. In Chapter 3 the methodology and design of the research are discussed. In Chapter 4 the results, analysis and presentation are described. Chapter 5 presents the conclusion, recommendations and suggestions for further research.

CHAPTER 2 – BACKGROUND AND LITERATURE REVIEW

This chapter first provides an overview and gives a background to location choice. Secondly, it discusses the importance of CRE, neighbourhood preferences and building attributes. Third, the theoretical and conceptual framework is reviewed. Lastly, some developments of location decisions in real estate are discussed.

2.1 OVERVIEW OF LOCATION CHOICE

Location choices, micro or macro, determine the success of businesses and firms, and a number of real estate researchers concern themselves with these issues (Kilkenny and Thisse, 1998).

This has its origins in the ideas of geographic returns to scale first introduced by Thunen (1825) and later Marshall (1890), and to the firm relocation decisions model in an urban economy with multiple locations (Brinkman, Coen-Pirani and Sieg, 2011). These concepts have led to the discussions of new social organisation of the property sector delivering new structures of property provision and use (Guy and Henneberry, 2000). This extended to the concept of the 'edge city' in the 1990s where utility gains from lower average land rents and other economies have provided employment and developed commercial nodes that have greatly affected suburban life, creating new commercial nodes and suburban agglomeration (Button, 1998).

A number of studies have also dealt with the concept of multinucleation, of business and firm location relating to locational and spatial issues in general, and in particular decentralisation, relocation of firms, regeneration and redevelopment to suburb node establishment and why these occur (Wong, 2002; Erickson, 2005; Kryvobokov, 2005). More specifically, a few of these studies have dealt with locational concepts at the level of neighbourhood preference and building attributes (Verburg et al., 2004; Leby and Hashim, 2005; Ho, Newell and Walker, 2005; Doak and Karadimitriou, 2007; Aluko, 2011; Nappi-Choulet and Decamps, 2013). Interestingly, there is much in common between investor character and behaviour worldwide and engagement with these same concepts and constructs within the Pretoria Metro and CBD situation, in particular the office sector. These are driven by strong institutional and investor attitudes and behaviour in the area and likewise elsewhere in the country (Adair, Berry, McGreal, Deddis and Hirst 2000; Guy, Henneberry and Rowley, 2002; Hess and Liang, 2003).

Economic activity in general takes place within a spatial setting and while other branches of economics ignore the spatial aspects of decision making, this study

focuses on a city as representing the centre of economic activity and will pay specific attention to the determinants or influences of location decisions of firms.

Many spatial economic topics can be analysed within either a neighbourhood or nodal context as some economic phenomena primarily affect local areas while others are felt over larger areas.

2.2 THE IMPORTANCE OF CORPORATE REAL ESTATE, NEIGHBOURHOOD PREFERENCES AND BUILDING ATTRIBUTES

2.2.1 The Importance of CRE

Recently there has been an increasing importance and recognition of CRE within organisations (Manning et al., 1999; Gibson, Virginia, Lizieri, Colin, 2001; Hsiao-Chi Chen, Ya-Wen Yu, 2008). What is becoming more and more important for CRE agents, in the current and in future, within organisations is the rationalisation of these property portfolios and it is evident that there is a rising level of professionalism and experience within the sector (Roulac et al., 2002). This has made the office sector particularly important for the firm's identity and image which are at the heart of this study.

2.2.2 The Traditional Urban Spatial Structure

Traditional urban spatial structure is best defined by the monocentric city model and describes the formation, function and development of cities. In a number of these studies formation and development, followed by the phenomenon of movement away from these city centres (city centre decline), has been widely explored (Alonso et al., 1960; Ho et al., 2005). However, concepts relating to movements back to the centre have not been explored. In Pretoria these spatial patterns have not been "traditional" (Erickson and Wasylenko, 1980), especially for the greater Pretoria Metro and the CBD, given that apartheid planning in South Africa caused unusual spatial allocations.

At the micro level of these decisions and choices about neighbourhood preferences and building attributes, there few studies that attempt to define the decisions to relocate businesses and firms back to the CBD. The available studies deal in the main with decentralisation to suburban nodes as motivated by the traditional city models and linear city model (Hotelling, 1929).

2.2.3 Edge City Concept

As defined by the polycentric city model, it has been suggested that city growth is sometimes the cause of city's own decline and the formation of edge cities due to temporary shocks in the system, including "privatopia" of new corporate offices (Button, 1998). It is also argued that transport systems facilitate industry around the edge city.

The decisions made to location in new corporate offices are largely driven by:

- Congestion, in that it decreases the quality of life;
- lack or inadequate parking, for workers and visitors creating annoyance;
- additional or new entrants to the work place, it increases the space requirement of the business or firm;
- political groups (social groups), the need to associate or identify with particular groups; and
- institutional investor behavior, competitor attitude or behavior in that when one investor invest in or out of a particular area the others follow.

The movement of services to edge cities as a result of the increase of corporate business and agglomeration is at the cornerstone of attracting businesses and firms to areas that have embarked on these initiatives (Button, 1998).

2.2.4 Neighbourhood Satisfaction

Neighbourhood satisfaction distinguishes between groups of determinants ranging from demographic characteristics, subjective evaluation of neighbourhood attributes and of the dwelling, and objective neighbourhood characteristics which focus on how individuals see (satisfaction) and think others see (perception of reputation) their neighbourhood, in measuring the determinants that are important for location choice (Des Rosiers et al., 2000; Permentier et al., 2011). These provide the criteria for neighbourhood and building preference that are being tested in this study

2.2.5 Liveability

The concept of liveability, which is defined as the measure of the overall quality of life, is a derivative of sustainable land development concepts which drive compact city initiatives (Howley, Scott and Redmond, 2009; Leby and Hashim, 2010). Compact city concepts, and their perceived effect on quality of life, may if taken too far, spoil the quality of life, thereby creating an unintended inverse relationship with liveability. The notion that urban intensification gives rise to poor neighbourhoods and buildings and

leads to neighbourhood dissatisfaction is the major focus of this study. The factors defined in the construct of liveability that improve services and facilities, deliver better public transportation and vibrant cultural life are therefore defined by better neighbourhoods and buildings.

2.2.6 Sense of Place

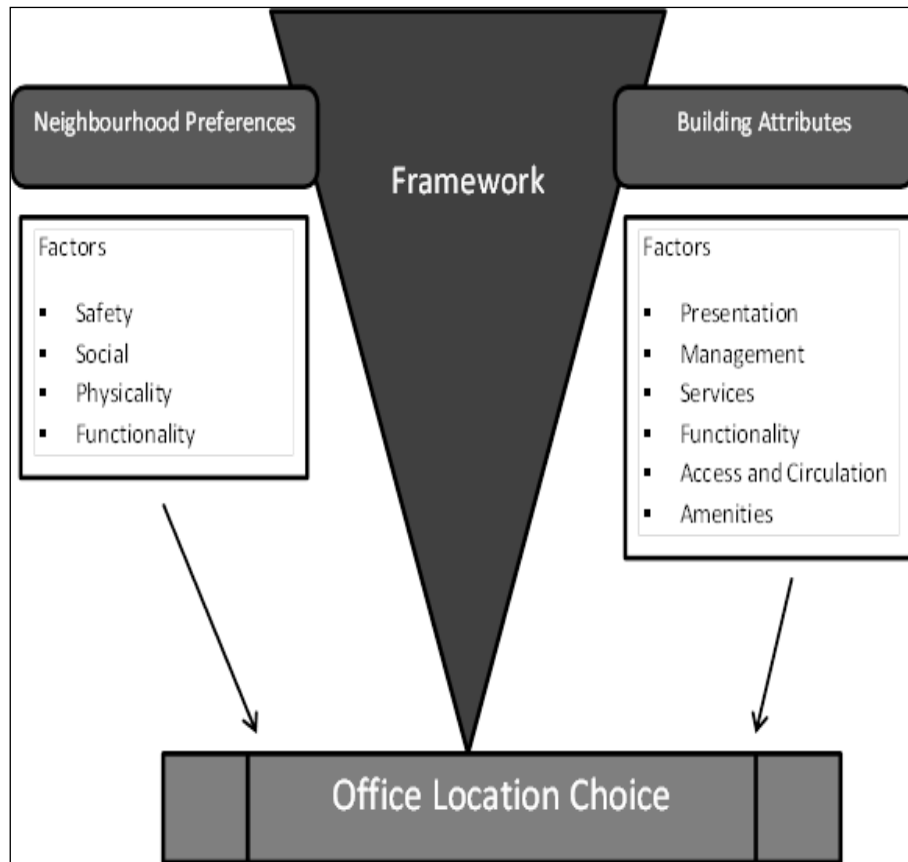
The concept of sense of place explains how places have or do not have meaning to individuals or groups (Wardner, 2012). This has three dimensions, the physical structure, activities that take place and the meaning individuals give to it. At its simplest it takes place at neighbourhood (preference) and building (attributes) level.

2.3 THE THEORETICAL AND CONCEPTUAL FRAMEWORK

While all of these studies portray the application of various determinants in defining these concepts, they converge into plausible studies of location dimension and lack the other dimensions of participants' attitudes and behaviour influenced by broader real estate fundamentals. In Howley et al. (2009) and in Permentier et al. (2011), it is suggested that perceived personal characteristics have no significant effect on neighbourhood satisfaction and perceived reputation is in itself insignificant. However, in Leby and Hashim (2010) analyses and understanding of subjective indicators shed a lot of light beyond the objective indicators.

These efforts can be said to have been of some value, but have not extended the dimensions they test to holistically include the importance and the interdependence of its parts, and the formulation and determination of new nodes. Furthermore these analyses have focused on generalisation (general application meaning generalisability) rather than specialisation (special application). In this study the units that are being tested, the investigation and the results are based on an area and on a particular building of a specific neighbourhood (preference) and on a specific building (attributes).

Figure 2.1: Conceptual and Theoretical Framework



2.3.1 Neighbourhood Preferences

This study looks specifically at the neighbourhood preferences and building attributes. First the neighbourhood preferences are looked at in so far as *social*, *safety*, *physical* and *functional* dimensions are perceived to be important, and determine preference (De Rosiers et al., 2000; Cervero and Duncan, 2004; Leby and Hashim, 2010; Aluko, 2011; Permentier et al., 2011). In addition *prestige*, *historic* and *heritage* dimensions are added to rank the order of preference of these nodes, which in turn will determine new precincts within the CBD node.

2.3.2 Building Attributes

Second, the building attributes will be looked at with *presentation*, *management*, *functionality*, *services*, *access and circulation*, and *amenities* being ranked in order of importance (Ho, 1999; De Rosiers et al., 2000; Ho, Newell and Walker, 2005; Des Rosiers et al., 2007; Aluko, 2011; Permentier et al., 2011). In addition, attractiveness of a building depends on more than just quality and architecture; it also closely relates to

the factors such as the desire to locate near the centre of the city, distance from transportation and demand for office space near public parking lots (Hough and Kratz, 1983). These factors were added to this dimension and are closely related to occupier's space choice and decisions (Leishman and Watkins, 2004; Sing et al., 2006; Luoma et al., 2010).

2.3.3 Repelling Factors

There are number of factors that cause decentralisation or repel business and firms from the CBD to urban periphery as mentioned above. These include:

- overpopulation as a result of densification;
- traffic congestion and lack of parking areas near or within walking distances from work the place; and
- poor or lack of access to public transportation within walking distances from work the place.

2.3.4 The Essence of the Study

The concepts neighbourhood preference and building attributes are not dealt with exclusively enough in the literature to elicit the intrinsic dimension of each, which is the key approach in this study. Neighbourhood preferences are strongly explained by a combination of belonging, status and prestige (Permentier et al., 2011) and building attributes are strongly represented by a combination of image, stature and association (De Rosiers et al., 2000).

This study extends the focus, by distinguishing between neighbourhood preferences and building attributes and tests these separately to establish their measure of importance in determining the location decisions by businesses and firms. This combination of dimensions has not been articulated in previous research.

This research is about what will bring or relocate firms from the suburbs to the CBD by investigating and looking into the factors, preferences, attributes and criteria of neighbourhood preferences and building attributes, and determining their importance.

These should provide some valuable insights into neighbourhood satisfaction, liveability and sense of place, and to further research.

2.4 SOME DEVELOPMENTS OF STUDIES IN REAL ESTATE–FIRM LOCATION DECISIONS

As mentioned previously, several studies have been undertaken to define and articulate the decisions by businesses' and firms' location or relocation, with particular focus on why and how decentralisation from the city centres occurs (Erickson and Wasylenko, 1980; Cohen, 2000; Korthals Altes, 2002). Important questions are why decentralised or suburban nodes form as a result of city growth (Hough and Kratz, 1983), and why and how the participants' socio-economic-political orientation influences these decisions (Healey, 1995; Adair, Berry, McGreal, Deddis and Hirst 2000; Guy, Henneberry and Rowley, 2002). However, whenever decentralisation has occurred the relocating firms have been replaced by smaller and less established businesses. Very seldom have the city centres completely disappeared. These movements have been defined largely as "CBD to suburb" (Richardson, 1988; Kilkenny and Thisse, 1998).

In this study the reverse is propounded and is dealt with within the context of the move from suburb to CBD. Here the neighbourhood preferences and building attributes that attract and influence businesses and firms' decisions to locate in the CBD are investigated. The study examines whether they would be relocating back, locating for the first time or making a choice to stay. Understanding of the issues that determine neighbourhood preferences and building attributes that will support and promote businesses' and firms' location decision making by identifying the preferences and attributes that are important in creating a healthy and comfortable office environment becomes significant (Vandell and Lane, 1989; Cervero and Duncan, 2004; Des Rosiers et al., 2007; Permentier et al., 2011).

This study draws on the above concepts to arrive at firms' neighbourhood preferences and building attributes that are fundamental in influencing firms' location decisions.

CHAPTER 3 – METHODOLOGY

This chapter discusses research design, sampling (including targeted population, sampling method and sample size), data collection and data analysis

This study is a descriptive research and encompasses quantitative analysis of data collected from a non-probability selective sample (purposive sampling method) (see Figure 3.1) (Roulac, 2002; Hess and Liang, 2003). This is done in order to gain a representative sample (Ho, Newell and Walker, 2005; Leby and Hashim, 2010; Aluko, 2011).

Both primary data from the survey questionnaire and secondary data from credible publications are used in this study.

3.1 RESEARCH DESIGN

This study used a survey method, with a multilevel questionnaire comprising a Likert Scale for neighbourhood preferences and building attributes and selecting the preferred precinct (Ho, Newell and Walker, 2005; Leby and Hashim, 2010; Aluko, 2011).

A self-administered survey questionnaire was used to obtain participants' preferences or degree of importance or agreement with a statement or set of statements. Respondents were asked to indicate their level of agreement with a given statement by way of an ordinal scale.

The relationship between neighbourhood preferences, building attributes and office location choice was tested using correlation.

3.2 SAMPLING METHOD

A purposive sampling method was used. A selection from a population of individuals that are decision makers on issues of real estate within their organisations or firms, were sampled (see Figure 3.1). These organisations or firms had or were looking for office premises within the greater Pretoria area, including the CBD. These organisations were a combination of a pre-determined proportional representation from institutional investors, government entities, occupiers, designers, developers and managing firms (Roulac, 2002; Hess and Liang, 2003). These firms were identified by

the researcher from his own knowledge of the firms involved in real estate activity in and around the area.

3.2.1 Target Population

The population comprised of about 840 businesses in the categories mentioned above, see also Table 1a, this was established from the yellow pages of Pretoria Central. The target population was persons that are decision makers in issues of CRE in general within their organisations or firms. The organisations or firms they represent had been located within the greater Pretoria area for no less than two years, giving them enough property-related knowledge of the area. In some cases individuals were not residents within the greater Pretoria but had enough knowledge and understanding of the intricacies and nuances of the subject area: these individuals were identified on site by the researcher when distributing the questionnaires.

The organisations or firms were conducting their business and occupied office space within the economic sector population segments shown in Figure 3.1.

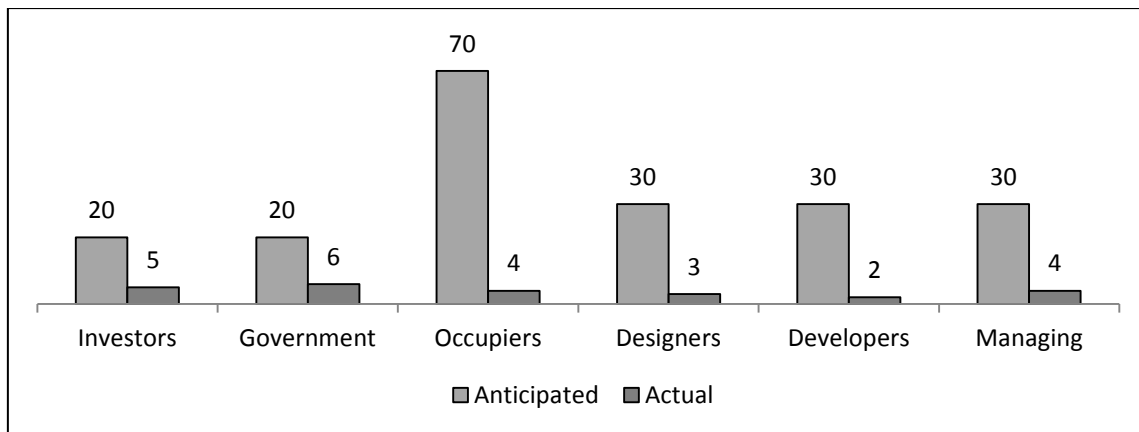
3.2.2 Sampling

The researcher delivered by hand and presented the questionnaires to each participant. The questionnaires were collected from participants after a few weeks. The participants were mostly drawn from the private sector and some from public sector entities in the proportions shown in Figure 3.1.

3.2.3 Sample Size

The targeted number of participating organisations is as shown in Figure 3.1. This provided an adequate proportional spread of the sample of firms among the targeted economic sectors and populations, and an adequate sample size. The sample size is 265, Krejcie and Morgan, 1970.

Figure 3.1: Profile of Participants



These individual participants were expected to complete the questionnaires, which were collected after a few weeks. Ethical considerations are discussed in section 3.5.

3.3 DATA COLLECTION

Data was collected by way of self-administered questionnaires to individuals that were representatives or owners of firms or businesses within the real-estate market and are conducting their business in Pretoria and from government institutions located in Pretoria, regardless of their head office locations. They were selected based on criteria identified from literature. No incentives were provided to encourage participants. The data collection took place between October 2016 and December 2016, as provided by the research timelines.

Other pertinent data on demographics, census, property economics of Pretoria, etc. that are not elicited from questionnaires were gathered from periodicals and publications by reputable publishers in South Africa, to look at firm size (big, medium, small), demographics, availability of property or lack thereof, supply and demand and absorption of office space in the Pretoria Metro.

Door-to-door survey questionnaires were distributed by way of personal delivery to the selected participants by the researcher. Then 20 to 30 minutes were spent with the participant running through the intentions of the research, and explaining briefly the problem statement and then clarifying and explaining some difficult questions. The questionnaire had the following structure: Section 1: Organisational Information, Section 2: Neighbourhood Preferences, Section 3: Building Attributes, Section 4: Office Space Requirements, Section 5: Demographic Information.

The structure of this questionnaire was multilevel as mentioned above, in the sense that it gathered information and data about the demographics in general (Section 5) and organisational makeup in particular (Section 1), then gathered information about the city, then about the neighbourhood (Section 2) and then about the building (Sections 3 and 4).

3.3.1 Measurement

Four factors and 12 sub-factors for neighbourhood preferences and six factors and 18 sub-factors for building attributes were tested and analysed in order to determine the relative importance and rank (Ho et al., 2005; Leby and Hashim, 2010, Aluko, 2011); see Tables 3.1 and 3.2.

3.3.1.1 Neighbourhood Preferences

Table 3.1: Neighbourhood Factors and Sub-Factors

Preferences	Sub-Factors
Safety	Property Safety Personal Safety Police Visibility
Physical	Maintenance of Area Traffic Nuisances Open Spaces
Functionality	Shopping and Postal Centres Employment Levels Health and School Facilities
Social	Neighbour Behaviour Sociability of People Friends and Family

3.3.1.2 Building Attributes

Table 3.2: Building Factors and Sub-factors

Attributes	Sub-Factors
Presentation	External and Internal Finishes Age of Building Number of Storeys
Management	Maintenance and Cleaning Security and Access control Energy Consumption
Services	Toilet Facilities Electrical and IT Services HVAC Capacity
Functionality	Floor Sizes Space Efficiency Column Layout
Accessibility	Parking in Building Lifts Performance Ingress
Amenities	Food Outlets Banks and Postal Services Gym and Health

3.3.2 Validity and Reliability of Instrument Used

The method that was used in evaluating the questionnaires was an informal, individually-based expert review. An independent expert review on the assigned questionnaire was conducted by a statistician to determine whether each questionnaire item was problematic. Improvements were effected by eliminating ambiguity and more protection of the identity of the participants was achieved.

3.4 DATA ANALYSIS

To analyse data a mixture of descriptive statistics, graphs and some correlation was used. In this study it is sound to apply nonparametric methods to the data collected, because the data from the questionnaires can mostly be described as scores rather than true measurements. Questionnaire-derived data is likely to be nonparametric.

The specific descriptive statistics about the broad categories were further broken down to sub-factors or variables which were gathered and analysed. The presentation of results combines tables, charts and graphs.

3.5 ETHICAL CONSIDERATIONS

For ethical concerns, this research adhered to the framework and policies of the School of Construction Economics and Management and the University of the Witwatersrand Research Ethics Committee. Any data for research publication purposes was treated with anonymity unless permission was granted for it to be used otherwise. In addition, the data obtained was not used for either commercial purposes or made available to third parties without express written consent from the participants. All the participants in the study expressed their consent to use the data for research purposes.

CHAPTER 4 – RESULTS

This chapter consists of a description and analysis of results, which includes response rate, respondents' profiles, organisation profiles, requirements for office space of the respondents, demographics, relative importance of factors and sub-factors, relative importance of factors by respondent groups, location choice and attributes, and preferred precinct and findings.

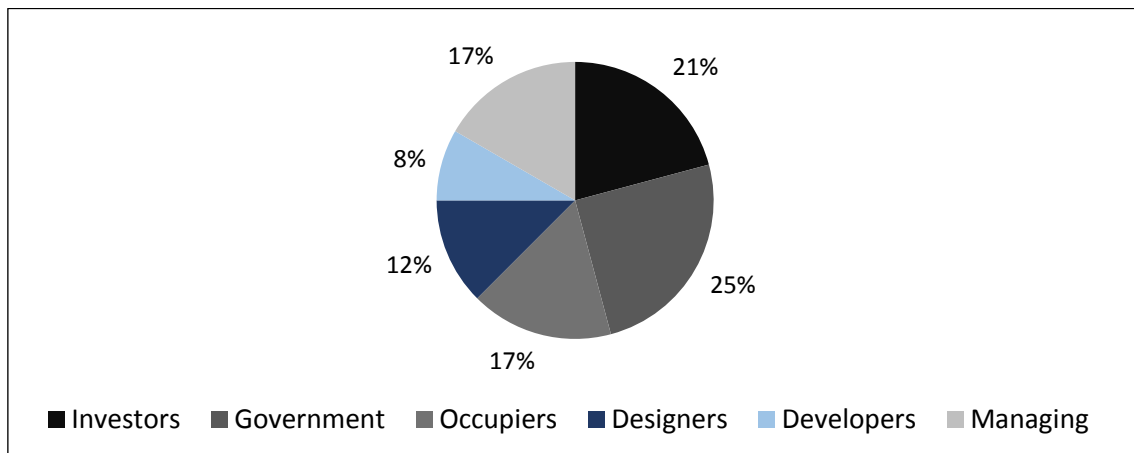
The presentation of results combines description, analysis, tables, charts and graphs.

4.1 DESCRIPTION AND ANALYSIS

4.1.1 Response Rate

Between October 2016 and February 2017, 60 questionnaires were distributed and 24 completed and collected (40%). The percentage breakdown of the respondents is shown in Figure 4.1. According to Krejcie and Morgan, 1970, the response rate is 9%. The sample was composed of individuals who are decision makers in matters relating to real estate, in particular to their firm location decision.

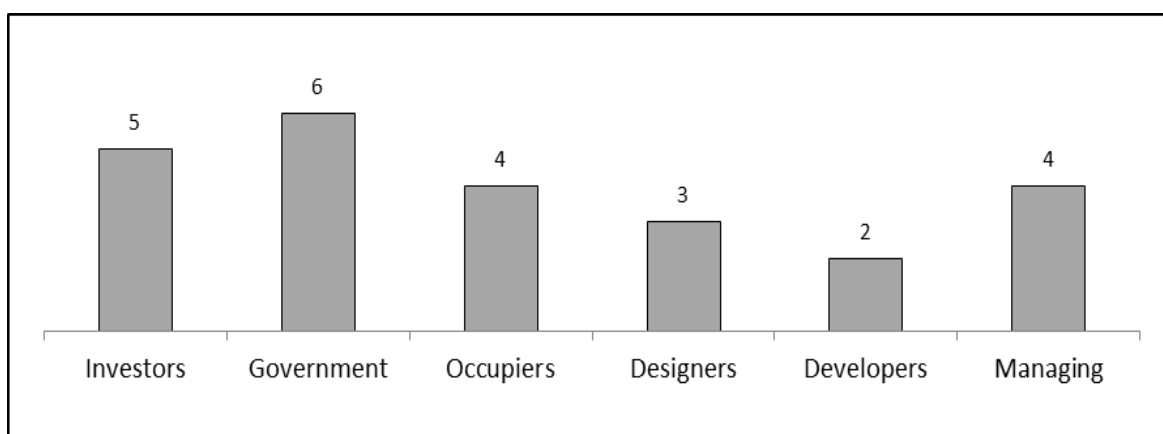
Figure 4.1: Percentage of Respondents per Category



4.1.2 Respondent Profile

The respondents were sourced and grouped according to categories of investors (5 = 21%), government (6 = 25%), occupiers (4 = 17%), designers (3 = 12%), developers (2 = 8%) and managing (4 = 17%) firms. The numbers of respondents per category depicted by these percentages are shown in Figure 4.2.

Figure 4.2: Number of Respondents per Category



4.1.3 Organisation Profile

Figure 4.3 indicates the percentages of private and public entities: 71% are private while the remaining 29% are public and or government entities, and the size of these entities range from small, medium to large based on assets under their management, number of employees and turnover.

Figure 4.3: Organisational Profile of Respondents

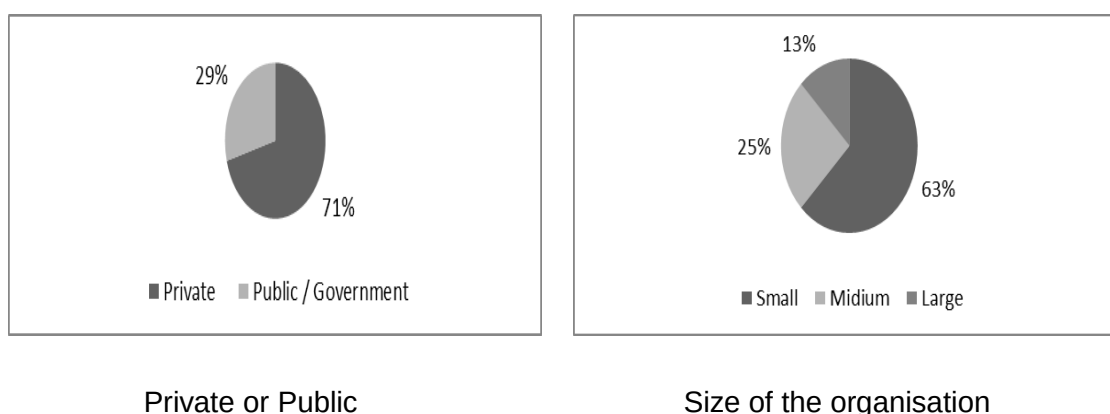
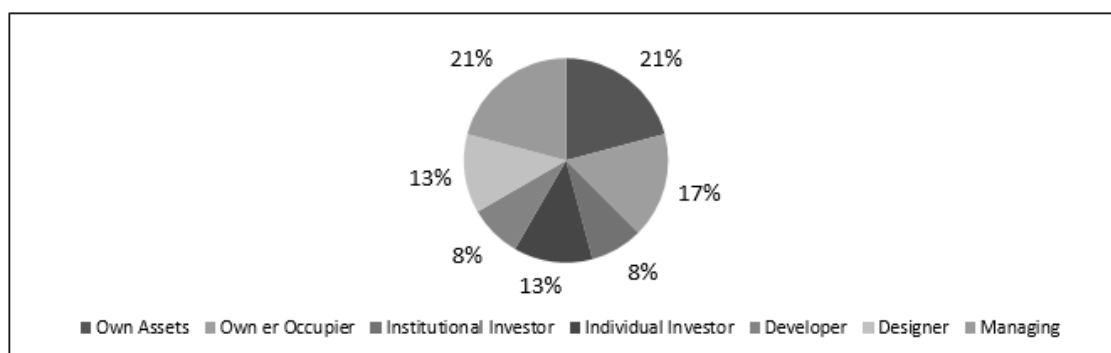


Figure 4.4 represents the percentage breakdown of organisations' roles within the office sector in Pretoria Metro. Of the responding individual organisations, 21% are owners of property assets, 17% are institutional investors, 8% are individual investors, and 21% are in the business of managing property assets.

Figure 4.4: Percentage of Organisations' Role within the Office Sector



4.1.4 Office Space Requirements

Figures 4.5 and 4.6 provide percentages of office space currently occupied and required by the participating firms in the Pretoria Metro. The majority, at 33%, occupies and requires more than 2500 m² of space.

Figure 4.5: Percentage of Office Space Currently Occupied

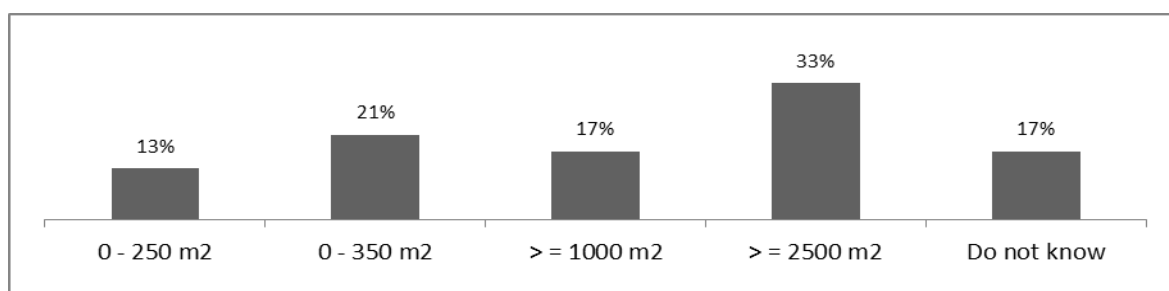
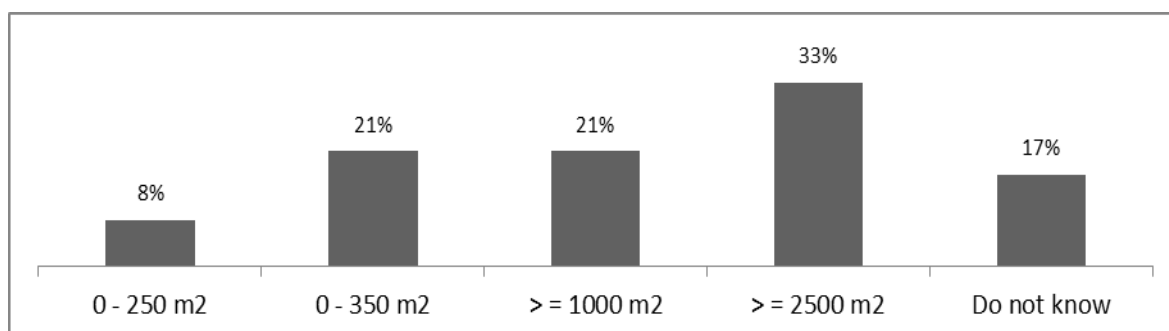


Figure 4.6: Percentage of Office Space Currently Required



4.1.5 Demographics

Fifty percent of respondents were male and 50% female with the majority being between the ages of 25 and 34, at 50%; 54% had a degree level of education; and 38% had five to 10 years of work experience (see Figures 4.7 and 4.8).

Figure 4.7: Gender and Age

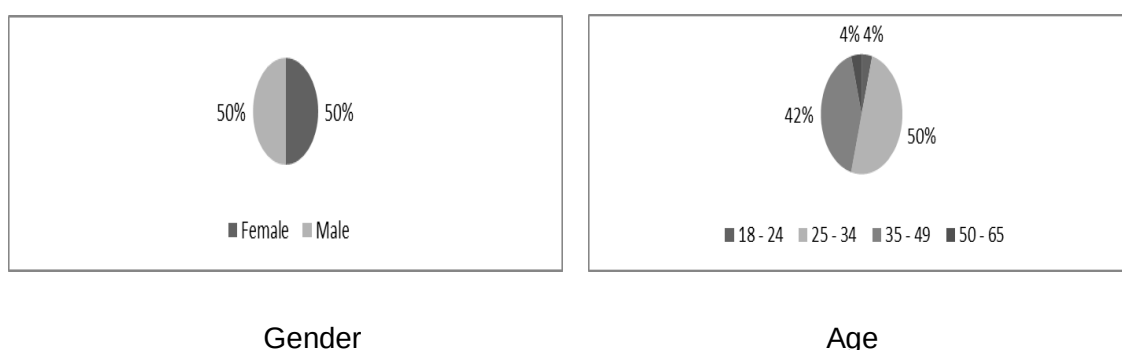
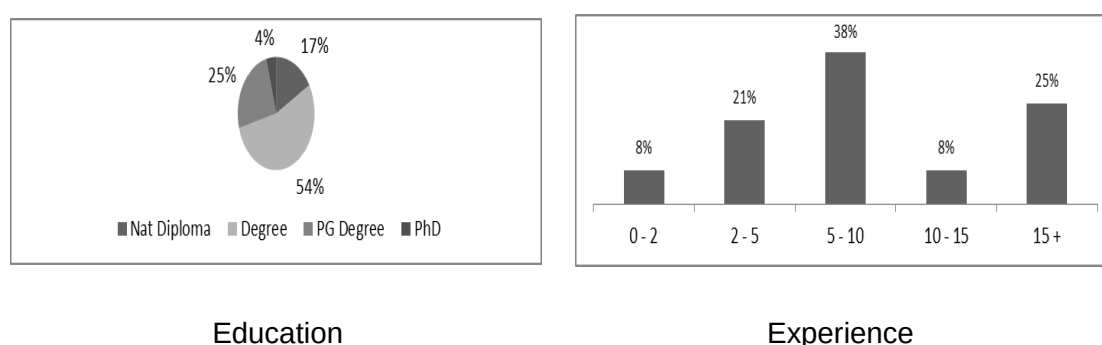


Figure 4.8: Education and Experience



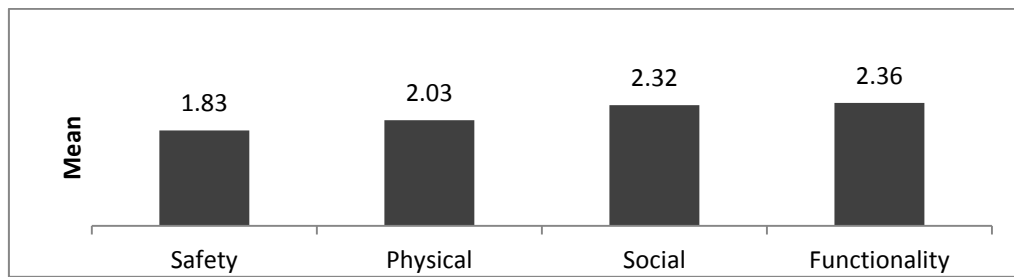
4.1.6 Relative Importance of Factors

The mean scores for neighbourhood preferences and building attributes were computed by averaging the mean of the sub-factors included in each factor, (see Figure 4.9 and Table 4.1, Figure 4.10 and Table 4.2).

The mean scores are compared to determine the relative importance of neighbourhood preferences and building attributes. The mean scores were rated based on a scale of 5 = not important, 1 = very important. Safety (1.83) was the most important factor and functionality (2.36) was the least important factor for neighbourhood preference. Management (1.72) was the most important factor and amenities (2.7) was the least important factor for building attributes. It is noted that mean scores for neighbourhood preference range from 1.83 to 2.36, and building attributes range from 1.72 to 2.76. These factors are consistent with being important to moderately important

4.1.6.1 Neighbourhood Preference

Figure 4.9: Mean Rating for Neighbourhood Preferences



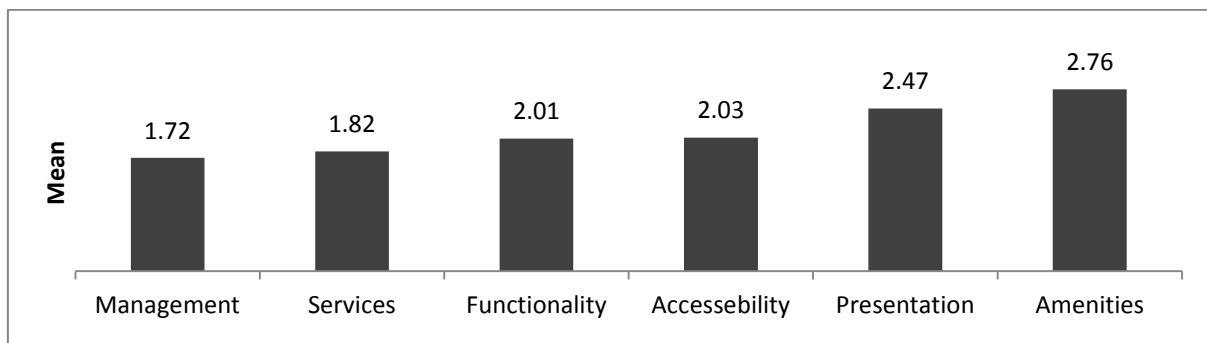
1 - Very Important 2 - Important 3 - Moderate Important 4 - Slightly Important 5 - Not Important

Table 4.1: Descriptive Statistics of Mean Rating for Neighbourhood Preferences

	Standard Error	Median	Range	Minimum	Maximum	Standard Deviation	Mean	Rank
<i>Safety</i>	0.16	1.67	3	1	4	0.79	1.83	1
<i>Physicality</i>	0.16	2	2.33	1	3.33	0.76	2.03	2
<i>Social</i>	0.15	2.33	3	1	4	0.75	2.32	3
<i>Functionality</i>	0.18	2.33	3	1	4	0.86	2.36	4

4.1.6.2 Building Attributes

Figure 4.10: Mean Rating for Building Attribute



1 - Very Important 2 - Important 3 - Moderate Important 4 - Slightly Important 5 - Not Important

Table 4.2: Descriptive Statistics of Mean Rating for Building Attribute

	Standard Error	Median	Range	Minimum	Maximum	Standard Deviation	Mean	Rank
<i>Management</i>	0.15	1.33	2.33	1	3.33	0.73	1.72	1
<i>Services</i>	0.19	1.33	2.67	1	3.67	0.91	1.82	2
<i>Functionality</i>	0.20	2	4	1	5	0.97	2.01	3
<i>Accessibility</i>	0.19	1.83	2.67	1.00	3.67	0.91	2.03	4
<i>Presentation</i>	0.17	2.33	3	1	4	0.84	2.47	5
<i>Amenities</i>	0.18	3	3	1	4	0.87	2.76	6

4.1.7 Relative Importance of Factors by Respondent Groups

4.1.7.1 Neighbourhood Preference

Table 4.3 shows the mean scores for neighbourhood preference as indicated by institutional investors. Safety (with mean score of 1.2) was the most important factor for neighbourhood preference and social (with mean score of 3.6) was the least important factor. Note the average of the mean scores for neighbourhood preference for investors is the second smallest factor at 2.25.

Table 4.3: Means for Neighbourhood Preference Indicated by Respondent Groups

Group	Safety	Social	Functionality	Physical	Neighbourhood Preference
Investors	1.2	3.6	2.6	1.6	2.25
Government	2	2.5	2.2	2	2.17
Occupiers	1.3	2.8	1.5	1.3	1.69
Designers	1	2.3	2	1	1.58
Developers	1	1	1	1	1
Managing	2	3.3	2	2.3	2.38
Avg.	1.41	2.57	1.88	1.52	1.84

4.1.7.2 Building Attributes

Table 4.4 illustrates the means for building attributes as indicated by institutional investors. Management (with a mean score of 1.2) was the most important factor for neighbourhood preference and functionality (with a mean score of 2.6) was the least important. Note the average of the mean scores for building attributes for investors is the second smallest factor at 2.00.

Table 4.4: Means for Building Attributes Indicated by Respondent Groups

Group	Presentation	Services	Management	Functionality	Accessibility	Amenities	Building Attributes
Investors	1.4	1.8	1.2	2.6	2.0	2.4	2
Government	1	1.8	2.7	2	2	1.8	2
Occupiers	1	1.5	1.3	1.5	1.3	2	1.42
Designers	2	1.7	1	1.7	1.7	1.3	1.56
Developers	1	1	1	1	1	2	1.17
Managing	1.8	2.5	2.3	2.5	3.5	4.3	2.79
Avg.	1.41	1.72	1.56	1.88	1.96	2.30	1.81

4.1.8 Relative Importance of Sub-Factors

4.1.8.1 Neighbourhood Preferences

Table 4.5 shows the relative importance and rank for all sub-factors that compose the factors for neighbourhood preference. The most important factor, safety (with a mean score of 1.83) is composed of the mean of sub-factors, property safety (1.58), personal safety (1.71) and police visibility (2.21); and the least important factor, functionality (2.36), is composed of the mean of sub-factors, shopping and postal centres (2.17), employment levels (2.29), health and school facilities (2.63). See also Appendix A.

Table 4.5: Descriptive Statistic for Neighbourhood Preferences and Sub-Factors

	Standard Error	Median	Range	Minimum	Maximum	Standard Deviation	Mean	Rank
Safety	0.16	1.67	3	1	4	0.79	1.83	1
<i>Property Safety</i>	0.169	1	3	1	4	0.830	1.583	1
<i>Personal Safety</i>	0.213	1	3	1	4	1.042	1.708	2
<i>Police Visibility</i>	0.217	2	3	1	4	1.062	2.208	3
Physicality	0.16	2	2.33	1	3.33	0.76	2.03	2
<i>Maintenance of Area</i>	0.169	1	3	1	4	0.830	1.583	1
<i>Traffic Nuisances</i>	0.213	1	3	1	4	1.042	1.708	2
<i>Open Spaces</i>	0.217	2	3	1	4	1.062	2.208	3
Social	0.15	2.33	3	1	4	0.75	2.32	3
<i>Shopping and Postal Centres</i>	0.169	1	3	1	4	0.830	1.583	1
<i>Employment Levels</i>	0.213	1	3	1	4	1.042	1.708	2
<i>Health and School Facilities</i>	0.217	2	3	1	4	1.062	2.208	3

	Standard Error	Median	Range	Minimum	Maximum	Standard Deviation	Mean	Rank
Functionality	0.18	2.33	3	1	4	0.86	2.36	4
<i>Neighbour Behaviour</i>	0.169	1	3	1	4	0.830	1.583	1
<i>Sociability of People</i>	0.213	1	3	1	4	1.042	1.708	2
<i>Friends and Family</i>	0.217	2	3	1	4	1.062	2.208	3

Table 4.6 indicates the means for individual sub-factors and are ranked 1 to 12 from the most important, which is maintenance of the area (with a mean score of 1.50), to the least important sub-factor which is open spaces (with a mean score of 2.75).

Table 4.6: Mean Rating for Neighbourhood Preferences Sub-Factors

Sub-Factors	Mean	Rank
Maintenance of Area	1.50	1
Property Safety	1.58	2
Personal Safety	1.71	3
Traffic Nuisances	1.83	4
Neighbour Behaviour	2.13	5
Shopping and Postal Centres	2.17	6
Police Visibility	2.21	7
Sociability of People	2.25	8
Employment Levels	2.29	9
Friends and Family	2.58	10
Health and School Facilities	2.63	11
Open Spaces	2.75	12

4.1.8.2 Building Attributes

Table 4.7 illustrates the relative importance and rank of all sub-factors that compose the factors for building attributes. The most important factor, management (with a mean score of 1.72) is composed of the mean scores of sub-factors, toilet facilities (with a mean score of 1.54), electrical and IT services (with a mean score of 1.75) and HVAC capacity (with a mean score of 2.17); and the least important factor, amenities (with a mean score of 2.76) is composed of the mean of sub-factors, gym and health (with a

mean score of 2.71), food outlets (with a mean score of 2.79), banks and postal services (2.79) (see also Appendix A).

Table 4.7: Descriptive Statistics of Mean Rating for Building Attributes and Sub-Factors

	Standard Error	Median	Range	Minimum	Maximum	Standard Deviation	Mean	Rank
Management	0.15	1.33	2.33	1	3.33	0.73	1.72	1
<i>Toilet Facilities</i>	0.17	1	2	1	3	0.83	1.54	1
<i>Electrical and IT Services</i>	0.22	1	3	1	4	1.07	1.75	2
<i>HVAC Capacity</i>	0.26	2	4	1	5	1.27	2.17	3
Services	0.19	1.33	2.67	1	3.67	0.91	1.82	2
<i>Maintenance and Cleaning</i>	0.17	1	2	1	3	0.83	1.54	1
<i>Security and Access Control</i>	0.22	1	3	1	4	1.07	1.75	2
<i>Energy Consumption</i>	0.26	2	4	1	5	1.27	2.17	3
Functionality	0.20	2.00	4.00	1	5.00	0.97	2.01	3
<i>Floor Sizes</i>	0.19	2	4	1	5	0.93	1.79	1
<i>Column Layout</i>	0.27	1	4	1	5	1.33	1.96	2
<i>Space Efficiency</i>	0.23	2	4	1	5	1.12	2.29	3
Accessibility	0.19	1.83	2.67	1	3.67	0.91	2.03	4
<i>Lifts Performance</i>	0.20	1	3	1	4	0.99	1.75	1
<i>Parking in Building</i>	0.18	2	3	1	4	0.88	1.79	2
<i>Ingress</i>	0.28	2	4	1	5	1.35	2.54	3
Presentation	0.17	2.33	3.00	1	4.00	0.84	2.47	5
<i>External and Internal Finishes</i>	0.13	1	2	1	3	0.65	1.42	1
<i>Number of Storeys</i>	0.28	2.5	4	1	5	1.39	2.75	2
<i>Age of Building</i>	0.27	3	4	1	5	1.33	3.25	3
Amenities	0.18	3.00	3.00	1	4.00	0.87	2.76	6
<i>Gym and Health</i>	0.24	2.5	4	1	5	1.20	2.71	1
<i>Food Outlets</i>	0.20	3	3	1	4	0.98	2.79	2
<i>Banks and Postal Services</i>	0.21	3	4	1	5	1.02	2.79	3

Table 4.8 shows the means for individual sub-factors, which are ranked 1 to 18 from the most important, which is maintenance and cleaning (with a mean score of 1.29) to the least important sub-factor which is number of storeys (with a mean score of 3.25).

Table 4.8: Mean Rating for Building Attributes Sub-Factors

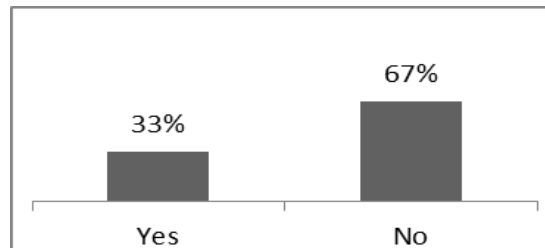
Sub-Factors	Mean	Rank
Maintenance and Cleaning	1.29	1
External and Internal Finishes	1.42	2
Toilet Facilities	1.54	3
Electrical and IT Services	1.75	4
Security and Access Control	1.75	5
Parking in Building	1.75	6
Floor Sizes	1.79	7
Lifts Performance	1.79	8
Space Efficiency	1.96	9
Energy Consumption	2.13	10
HVAC Capacity	2.17	11
Column Layout	2.29	12
Ingress	2.54	13
Food Outlets	2.71	14
Age of Building	2.75	15
Banks and Postal Services	2.79	16
Gym and Health	2.79	17
Number of Storeys	3.25	18

4.1.9 Location Choice – Preferences and Attributes

The participants were then asked if they would locate their businesses or firms within the Pretoria CBD.

Figure 4.11 depicts the percentage of businesses willing to locate in the CBD of Pretoria. Of the responding individuals only 33% said they would be willing and the majority, 67%, indicated they would not be willing to locate their business or firm within the Pretoria CBD.

Figure 4.11: Percentage of Firms Willing to Locate in the Pretoria CBD



The participants were then asked to choose a precinct within which they would prefer to locate their businesses or firms, among which were prestige, government, heritage and historic. Figure 4.12 depicts the percentages of participants' choice of preferred precinct. The precinct that was most preferred to locate near or within in the CBD of Pretoria was prestige (58%), which is shown to have the most number of 1 = most preferred, and heritage (58%) was the least preferred, with the most 4 = least preferred, to locate near or within. Government precinct was the next preferred after prestige at 2 (42%) and next historic at 3 (42%).

Figure 4.12: Percentage of Participants' Choices of Preferred Precinct to Locate to in the Pretoria CBD

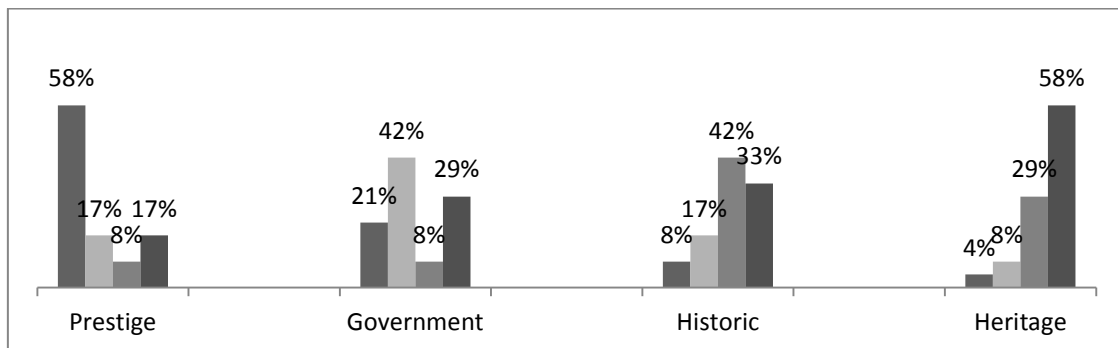


Table 4.9 depicts that the majority of businesses preferred to locate near or within the prestige precinct in the Pretoria CBD, the number that appears most was 1 = most preferred and heritage precinct was the least preferred, with the number that appears most being 4 = least preferred (see also Appendix B).

Table 4.9: Mode for Location Choice – Preferred Precinct in Pretoria CBD

Group	Prestige	Heritage	Historical	Government	Preferred Precinct
Investors	1	3	3	2	Prestige
Government	1	4	2	4	Prestige
Occupiers	1	4	4	2	Prestige
Designers	1	4	4	2	Prestige
Developers	-	-	-	1	Government
Managing	1	4	3	2	Prestige
MODE	1	4	3	2	Prestige

1 - MP

4 - LP

Table 4.10 portrays the order of ranking of the precincts. The most preferred precinct is prestige, second government, third historic, fourth and last heritage.

Table 4.10: Ranking – Preferred Precinct in Pretoria CBD

Precinct	Rank
Prestige	1
Government	2
Heritage	4
Historical	3

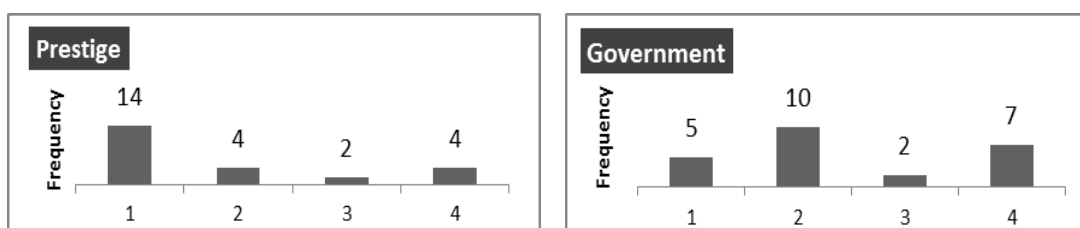
1 - MP

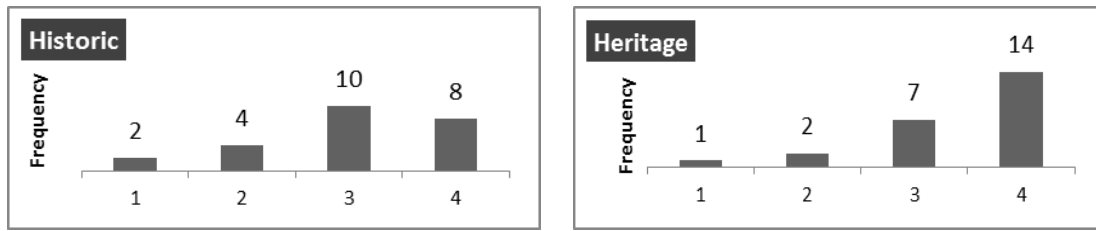
4 - LP

4.1.9.1 Sub-Factors – Preferred Precinct

Figure 4.13 defines the precinct that was most preferred to locate near to or within the CBD of Pretoria. Prestige (14) is shown to have the largest number of 1 = most preferred and heritage (14) was the least preferred, with the most 4 = least preferred, to locate near or within. Government precinct was the next preferred after prestige with most 2 (10) and next Historic with the most 3 (10).

Figure 4.13: Mode of Preferred Precinct





4.1.10 Neighbourhood Preference and Building Attributes from Factors

4.1.10.1 Neighbourhood Preferences

Table 4.14 and Table 4.12 show the mean scores of neighbourhood preference indicated directly by the respondents and not from mean scores of sub-factors. The results from direct mean scores differ from the result of sub-factors. Here the most important factor is still safety (with mean score of 1.5) but the least important factor is now social (with mean score of 2.75).

Table 4.11: Mean and Rank for Neighbourhood Preferences

	Standard Error	Median	Minimum	Maximum	Standard Deviation	Mean	Rank
<i>Safety</i>	0.159	1	1	3	0.78	1.5	1
<i>Physicality</i>	0.168	1	1	4	0.824	1.63	2
<i>Functionality</i>	0.181	2	1	4	0.885	2	3
<i>Social</i>	0.243	3	1	4	1.189	2.75	4

Figure 4.14: Mean and Rank for Neighbourhood Preferences

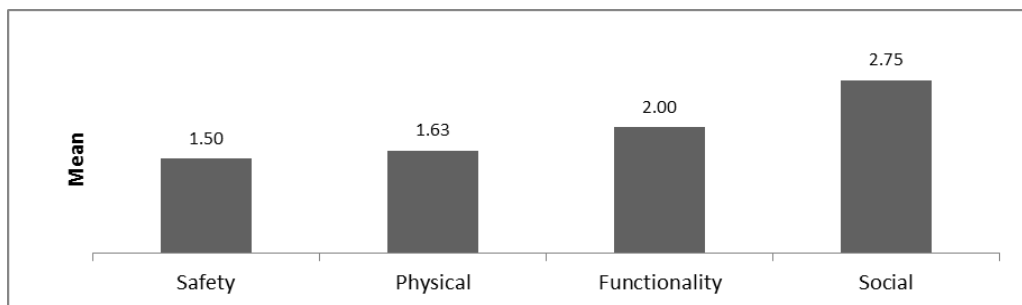


Figure 4.15 shows the means of neighbourhood preference indicated per group of respondents and it can be seen that developers have identified these factors as very

important (with mean scores of 1.0) and the institutional investor group registering the least (slightly important factor) as social (with a mean score of 3.6).

Figure 4.15: Mean Rating for Neighbourhood Preferences by Groups of Respondents

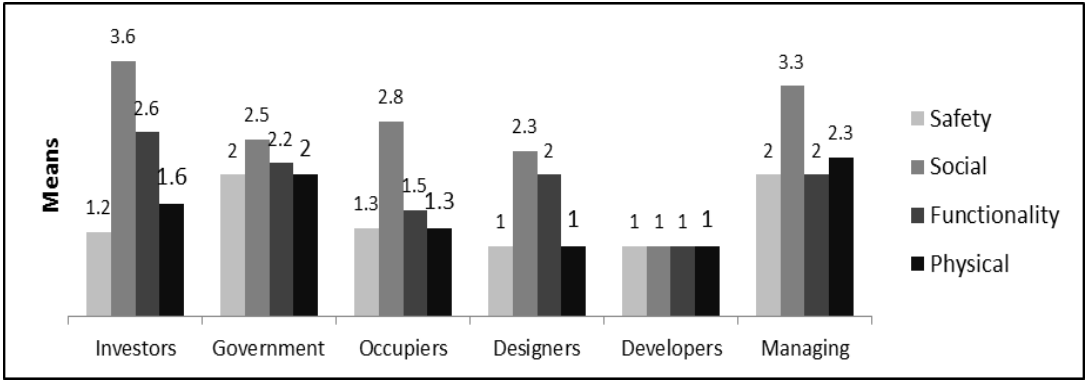
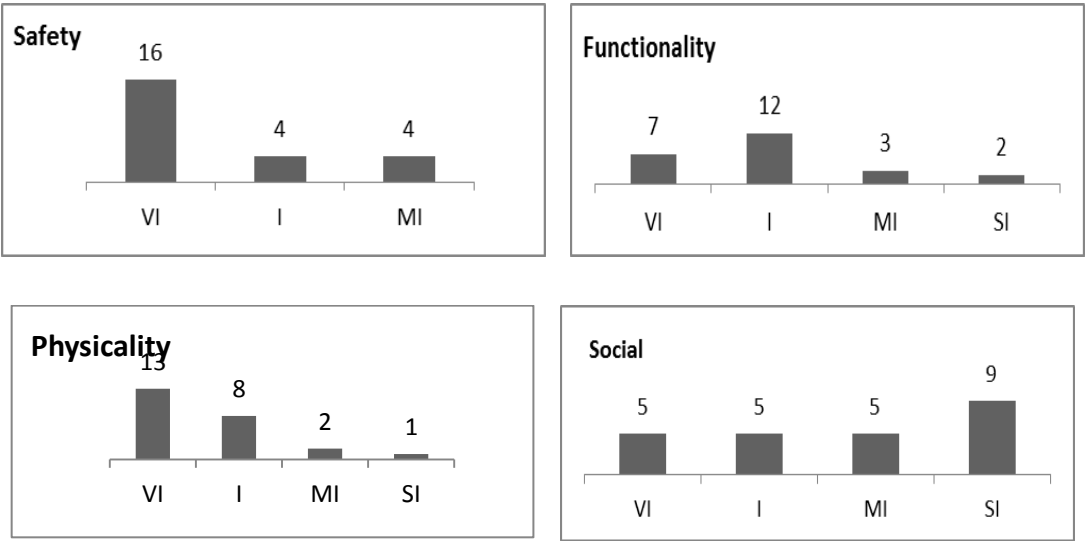


Figure 4.16 demonstrates the number of counts per factor that indicated how many indicated a particular factor as very important, important, moderately important or slightly important.

Figure 4.16: The Count of Indications per Factor for Neighbourhood Preferences



4.1.10.2 Building Attributes

Table 4.12 and Figure 4.17 display the mean of neighbourhood preference indicated directly by the respondents and not from the mean of sub-factors. The results from direct means differ from the result of sub-factors; here the most important factor is still safety (with a mean score of 0.5) but the least important factor is social (with a mean score of 2.75).

Table 4.12: Mean and Rank for Building Attributes

	Standard Error	Median	Minimum	Maximum	Standard Deviation	Mean	Rank
<i>Presentation</i>	0.133	1	1	3	0.654	1.417	1
<i>Management</i>	0.213	1	1	4	1.042	1.708	2
<i>Services</i>	0.17	2	1	4	0.833	1.792	3
<i>Functionality</i>	0.233	2	1	5	1.142	2	4
<i>Accessibility</i>	0.275	1.5	1	5	1.349	2.083	5
<i>Amenities</i>	0.26	2	1	5	1.274	2.333	6

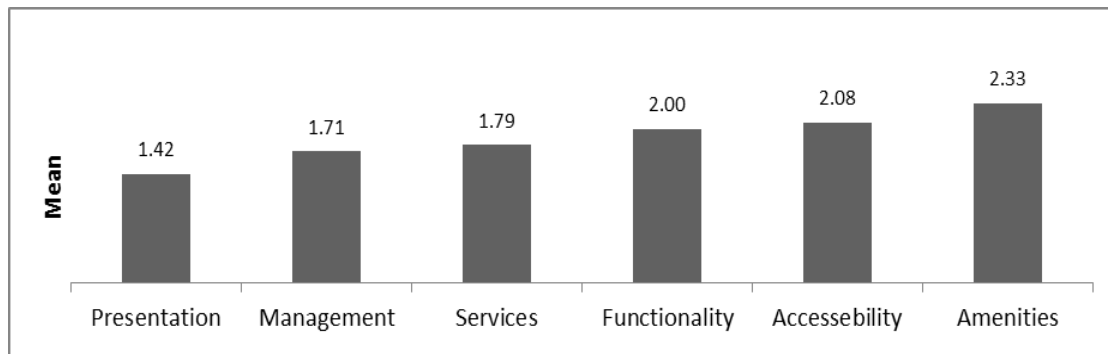
Figure 4.17: Mean and Rank for Building Attributes

Figure 4.18 shows the means of building attributes indicated per group of respondents and it can be seen that investors have indicated these factors as very important and the managing firms group registering the least i.e. slightly important factor, social (4.3).

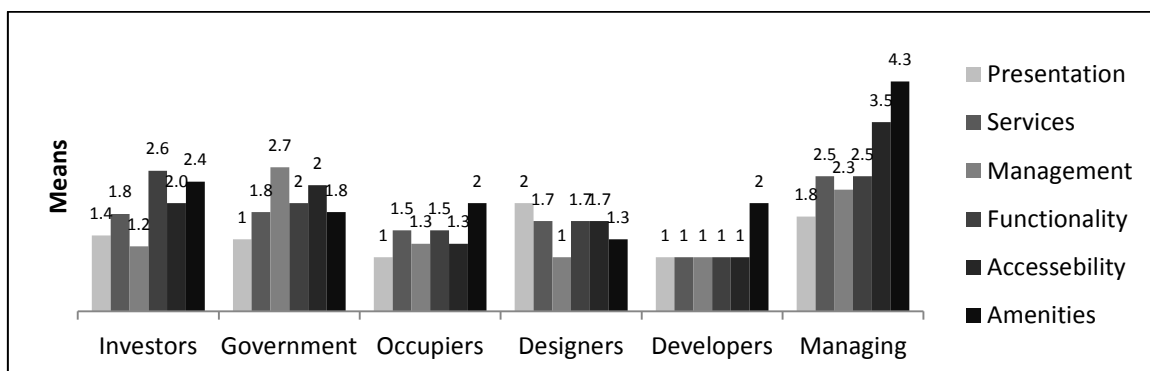
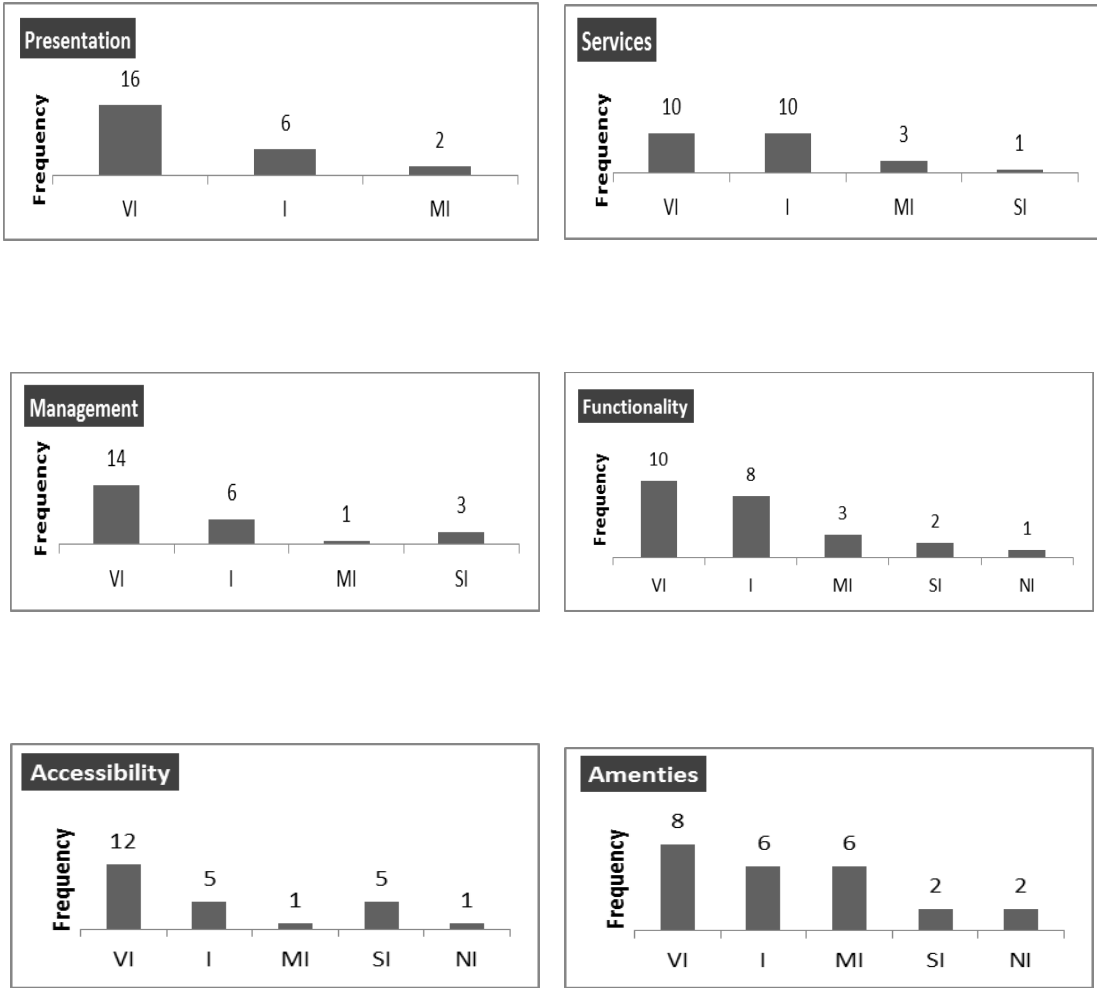
Figure 4.18: Mean Rating and Relative Importance of Building Attributes for Group Respondents

Figure 4.9 demonstrates the number of counts per factor that depicts how many indicated a particular factor as very important, important, moderately important or slightly important

Figure 4.19: Frequency of Relative Importance of Building Attributes



4.2 RELATIONSHIP BETWEEN NEIGHBOURHOOD PREFERENCES, BUILDING ATTRIBUTES AND OFFICE LOCATION CHOICE

Figure 4.20 depicts the scatter plot for neighbourhood preference mean scores with office location within the Pretoria CBD. This shows there is a positive relationship between the two.

Figure 4.20: Scatter Plot for Neighbourhood Preferences and Location Choice in Pretoria CBD

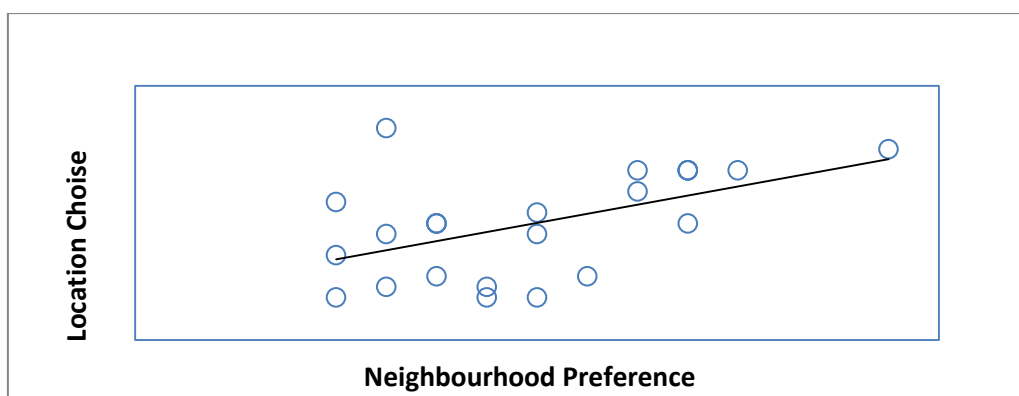


Table 4.13 represents the computed correlation results for neighbourhood preference mean scores with office location within the Pretoria CBD. The results show a moderately positive relationship between the two at 0.52.

Table 4.13: Correlation between Neighbourhood Preference and Location Choice

	Neighbourhood Preference	Location Choice
Neighbourhood Preference	1	
Location Choice	0.5213	1

Figure 4.21 portrays the scatter plot for building attributes mean scores with office location within the Pretoria CBD. This shows there is a positive relationship between the two.

Figure 4.21: Scatter Plot for Building Attributes and Location Choice in Pretoria CBD

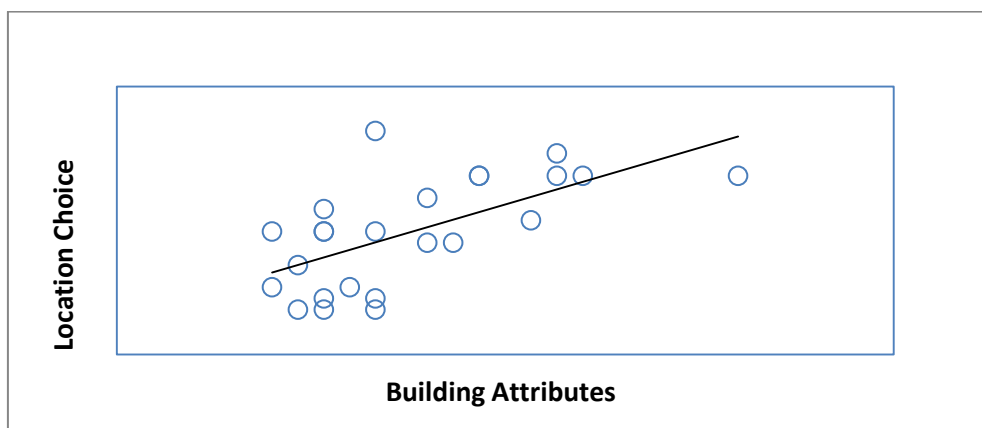


Table 4.14 represents the computed correlation results for building attributes' mean scores with office location within the Pretoria CBD. The results show a little more than moderately positive relationship between the two at 0.63.

Table 4.14: Correlation between Building Attributes and Location Choice

	Building Attributes	Location Choice
Building Attributes	1	
Location Choice	0.6278	1

4.3 FINDINGS

The factors and their sub-factors were identified from literature, and from the results it can be argued that they are all related to office location decision making, based on their mean scores calculated both by direct questions as to their importance to neighbourhood preferences and building attributes, and by their mean scores calculated from their sub-factors.

All factors are between very important and moderately important with mean scores ranging between 1.5 and 2.75 for all neighbourhood preferences, and 1.29 and 3.25 for all building attributes.

The majority of businesses would not prefer to locate within the Pretoria CBD, with 33% saying yes and 67% saying no. The most preferred precinct that the business would prefer to locate near or within is prestige, followed by government, and historic, with heritage being the least preferred.

The results for the relationship between neighbourhood preferences, at 0.52, building attributes, at 0.63 and the office location choice are both positive and moderate meaning that they are relatively strong.

Looking at the respondents by groups, the developers firms' mean scores for neighbourhood preferences (mean score of 1.0) was the highest, implying neighbourhood preference factors are very important, and the managing firms' mean score for same neighbourhood preference (mean score of 2.79) was the lowest, implying that they are moderately important, while the other groups lay in between. The institutional investors together with government institutions showed the highest mean score of 2.0 for building attributes, implying that these factors were important, and

managing firms had the lowest mean score of 2.79, implying that these factors were slightly important.

Looking at the factors from the direct question about the importance of the factors the mean scores for neighbourhood preference are safety (1.83), physicality (2.03), social (2.32) and functionality (2.36) whereas the mean scores from sub-factors for neighbourhood preferences are safety (1.5), physicality (1.63), functionality (2.0) and social (2.75). Here, besides the differing means, functionality trades places with social as being the least important factor.

Looking at the factors from the direct question about the importance of the factors, the mean scores for building attributes are management (1.72), services (1.82), functionality (2.01), accessibility (2.03), presentation (2.47) and amenities (2.76), whereas the means scores from sub-factors for building attributes are presentation (1.42) management (1.71), services (1.79), functionality (2.0), accessibility (2.08) and amenities (2.33). Here, besides the differing means, presentation trades places with management as being the most important factor.

These results are for those who took part in this study and without running a test for significance we cannot infer the same relationship to the rest of the population of office location decision makers from which the sample was drawn.

4.4 DISCUSSION

This research is about investigating what will bring or relocate businesses' and firms' offices from the suburbs back to Pretoria CBD by looking into the influencing factors, preferences, attributes and criteria for neighbourhoods and buildings, and determining their importance. The findings of the study provide insight into the participants' perceptions and attitudes towards the importance of the various neighbourhood preferences and building attributes that influence firms' office location decisions. Further, it gives insights to their attitudes to locating their firms within the Pretoria CBD, and also provides insight into their interest in locating their firms near or within a particular precinct or node within the CBD of Pretoria.

The respondents' profiles comprise institutional investors, government institutions, occupier firms, designer firms, developer firms and managing firms or businesses within the office market sector in Pretoria Metro. These participants have reflected what the office location decision makers' preferences and towards locating their firms in the Pretoria CBD and greater Pretoria Metro.

The results of the questionnaire have shown safety to be the most important factor (mean score of 1.83 from sub-factors and mean score of 1.50 from factors) for neighbourhood preferences. Management and presentation were the most important factors (with mean scores of 1.71 for sub-factors and 1.42 from factors) for building attributes. This shows the general feeling, by the participants, of being unsafe when one is in the CBD, in terms of personal safety, property safety and visibility of police within the Pretoria Metro, in that order of importance. Second in importance is the look and feel of the area, as expressed by the mean scores for management and presentation of the areas and buildings, with regard to maintenance and cleaning, security and access control, energy consumption, and external and internal finishes. This is not peculiar to South Africa and Pretoria CBD; there has been a drastic and systemic degeneration and decline of major CBDs in general, and Pretoria CBD is no exception to this phenomenon. Also when cities grow they become their own problem, because of noise, traffic and congestion, leading to discomfort and a feeling of the area being unsafe and dilapidated.

As in other studies, safety has scored the highest with regard to neighbourhood preferences (Leby, 2010). However, unexpectedly and contrary to previous studies, management and presentation scored the highest regarding building attributes, while in other studies functionality scored the highest (Ho et al., 2005).

Safety and physicality scored the highest with mean scores of 1.00 and 2.30 respectively, with functionality being moderately important and social less so.

When grouping the results of the neighbourhood preference sub-factors three broad ranges are displayed. The first cluster, ranging between very important and important, were maintenance of the area, property and personal safety and traffic nuisances. The second most important (moderately important) were neighbourhood behaviour, shopping and postal centres, sociability of people, and employment levels. The third range is between moderately important and slightly important; these are friends and family, health and school facilities and open spaces.

Management and services were the most important attributes speaking to the operations of the buildings, cleanliness, and security issues within the buildings, which is in line with neighbourhood preferences.

When grouping the results of the building attributes sub-factors, four broad clusters are revealed. The first group, very important, is maintenance and cleanliness, and external

and internal finishes of the buildings. The second group is very important to important, which ranges from building services and facilities to performance and efficiency of the building. The third, important to moderately important, includes energy consumption, HVAC capacity and column layout, relating mostly to functionality of the building. Fourth and lastly, moderately important to slightly important, includes ingress and amenities like food outlets, banks and postal services.

Most respondents elected not to relocate their businesses to the CBD, because of the major concerns with the safety, management and presentation of the area and its buildings. Most of the respondents were renting space in newer premises and areas on the periphery of the city and felt relocating to old Pretoria was undesirable. However, most would choose to be located near a prestige precinct, which incorporated areas near the Treasury Department and The Reserve Bank, and government precincts near the Union Buildings. This is because of the consciousness of the prestige of Pretoria as the capital of the country. Most respondents were private entities who ordinarily do not do business with government; therefore, relocating to a predominantly government CBD did not add any value to their business.

There is strong positive relationship between the neighbourhood factors, building factors and office location choices within the Pretoria CBD, meaning improving neighbourhoods and building safety, presentation and management will increase the number of businesses and firms looking to locate within the area.

The results for the relationship between neighbourhood preferences, at 0.52, building attributes, at 0.63, and the office location choice are both positive, meaning that they are strong motivators.

CHAPTER 5 – CONCLUSION AND RECOMMENDATIONS

This chapter discusses first the conclusions from the findings, and second, recommendations to the stakeholders including the institutional investors in charge of making investment decisions, government institutions in charge of providing a policy framework to enable the investment to take place; and the property practitioners in charge of design, development and the management of these property portfolios. Lastly it discusses considerations for future research.

5.1 CONCLUSION

The findings of this study have provided a better understanding of the important variables with regard to neighbourhood preferences and building attributes in modern urban studies, and sets out to find a solution to the possible degeneration of the Pretoria CBD through its failing to attract investments and businesses who want to locate in the CBD. Individuals occupying differing settings will differ in their subjective assessments of these factors and concepts. This provides for a dynamic environment for the various actors in this space, from investors to government to the professionals and ultimately to the users and occupiers of these office spaces.

5.2 RECOMMENDATIONS

It is evident that different groups have varying perceptions of what would create a more conducive neighbourhood and building environment in which to work. The analysis indicates that efforts to promote the CBD should focus on ensuring the overall safety of property and persons, and management and cleanliness of the areas and the buildings, because these tend to enhance the image, and make people think highly of the areas they are in or would be willing to relocate to.

Accordingly policy, investment and design that take into account, factors such as neighbourhood preferences and building attributes identified as most important to moderately important are required in order to attract business back to Pretoria CBD.

Government institutions that are tasked with policy and administration should use these findings in generating policy that enables investment and property practices that promote safety, management and presentation of the areas and buildings.

Institutional investors should take into consideration development initiatives that cover issues of safety, management and presentation of the areas and buildings because these to some extent can ensure that their investments will be lucrative.

Property practitioners, including designers, developers and managing firms, should also consider the outcomes of this study, as this will ensure that occupiers of their areas and buildings are satisfied.

5.3 FUTURE RESEARCH

Given that this study tries to suggest a new combination of factors for office location decision making within the CBD, there remain numerous factors that require further research. More detailed research into the effects of neighbourhood preferences and building attributes, in particular office location in Pretoria CBD and other city centres in South Africa, needs to be undertaken. Furthermore, a detailed investigation is needed that looks into the attitudes of the various real-estate practitioner groups, especially institutional investor attitudes, towards investing in these metros and government in creating a favourable policy and administration environment (framework) for these investments to take place.

Refinement of the approach and methodology, and tools to gather data scales between factor intervals, for example between very important and important, by deriving other scales in between or by introducing a combination of tools in future studies will refine the scores and solve the problems of larger variances affecting validity and reliability.

In this study the factors were tested in two ways, by taking the mean of sub-factors and by direct mean of the factors, which yielded some variation in the mean scores, and therefore rankings in future using one of the two ways will not create validity and reliability problems.

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APPENDIX A:
Descriptive Statistic for Neighbourhood Preferences and Sub-Factors

Table 1a: **Category of participants, population and their proportion**

Intended Sample Size = 200			
Firm Category	Population (Approximate)	Proportional Participation (%)	Actual Participation
Institutional Investors , including	Population	Proportional Participation (%)	Actual Participation
▪ Insurance Companies, and	59	(10%)	(21%)
▪ Banks	42		
Government Institutions , including	Population	Proportional Participation (%)	Actual Participation
▪ National, Provincial and Local,	62	(10%)	(25%)
▪ State Owned Enterprises.	38		
Occupier Firms , including	Population	Proportional Participation (%)	Actual Participation
▪ Finance / Insurance / Real Estate	41	(35%)	(17%)
▪ Retail / Wholesale	37		
▪ Business services	12		
▪ Services ... Other	14		
▪ Law/Accounting/Medical/Consultants	389		
▪ Engineering / Architecture	40		
▪ Agriculture / Mining / Utilities	5		

Intended Sample Size = 200			
Firm Category	Population (Approximate)	Proportional Participation (%)	Actual Participation
▪ Communication	10		
Designers Firms, including	Population	Proportional Participation (%)	Actual Participation
▪ Architecture;	10	(15%)	(12%)
▪ Consultants.	18		
Developers Firms, including	Population	Proportional Participation (%)	Actual Participation
▪ Contractors	19	(15%)	(8%)
▪ Consultants.	23		
Managing Firms, including	Population	Proportional Participation (%)	Actual Participation
▪ Asset Management	7	(15%)	(17%)
▪ Property Management	9		
▪ Facilities Management	13		
Total	839	100 % 200 Number	100 % 24 Number

Table 1b - Listing the results by order and rank, and by participant

	Neighbourhood Preferences	Building Attributes	Neighbourhood Preferences				Building Attributes					
			Safety	Socio	Functionality	Physical	Presentation	Management	Services	Functionality	Access	Amenities
Investors	2	2.25	1.2	3.6	2.6	1.6	1.4	1.8	1.2	2.6	2.0	2.4
Government	2	2.17	2	2.5	2.2	2	1	1.8	2.7	2	2	1.8
Occupiers	1.42	1.69	1.3	2.8	1.5	1.3	1	1.5	1.3	1.5	1.3	2
Designers	1.56	1.58	1	2.3	2	1	2	1.7	1	1.7	1.7	1.3
Developers	1.17	1	1	1	1	1	1	1	1	1	1	2
Managing	2.79	2.38	2	3.3	2	2.3	1.8	2.5	2.3	2.5	3.5	4.3
AVERAGES	1.81	1.84	1.41	2.57	1.88	1.52	1.41	1.72	1.56	1.88	1.96	2.30

Table 1c: Mean Rating and Rank for Neighbourhood Preferences and
Sub-Factors

Preferences	Sub-Factors	Mean	Sub-Rank	Mean	Rank
Safety	Property Safety	1.58	1		1
	Personal Safety	1.71	2	1.83	
	Police Visibility	2.21	3		
Physical	Maintenance of Area	1.50	1		2
	Traffic Nuisances	1.83	2	2.03	
	Open Spaces	2.75	3		
Social	Neighbour Behaviour	2.13	1		3
	Sociability of People	2.25	2	2.32	
	Friends and Family	2.58	3		
Functionality	Shopping and Postal Centres	2.17	1		4
	Employment Levels	2.29	2	2.36	
	Health and School Facilities	2.63	3		

Table 1d: Mean Rating and Rank for Building Attributes and

Sub-Factors

Attributes	Sub-Factors	Mean	Sub-Rank	Mean	Rank
Presentation	External and Internal Finishes	1.42	1	1.42	1
	Age of Building	2.75	2		
	Number of Storeys	3.25	3		
Management	Maintenance and Cleaning	1.29	1	1.71	2
	Security and Access control	1.75	2		
	Energy Consumption	2.13	3		
Services	Toilet Facilities	1.54	1	1.79	3
	Electrical and IT Services	1.75	2		
	HVAC Capacity	2.17	3		
Functionality	Floor Sizes	1.79	1	2.00	4
	Space Efficiency	1.96	2		
	Column Layout	2.29	3		
Accessibility	Parking in Building	1.75	1	2.08	5
	Lifts Performance	1.79	2		
	Ingress	2.54	3		
Amenities	Food Outlets	2.71	1	2.33	6
	Banks and Postal Services	2.79	2		
	Gym and Health	2.79	3		

Neighbourhood Preference and Building Attributes for all Factors

Figures 1a below shows combined Neighbourhood Preference means for all the factors. Safety is ranked the most important and Functionality the least important.

Figures 1b below shows combined Building Attributes means for all the factors. Presentation is ranked the most important and Amenities the least important.

Figure 1a: Means and Ranks for Neighbourhood Preference

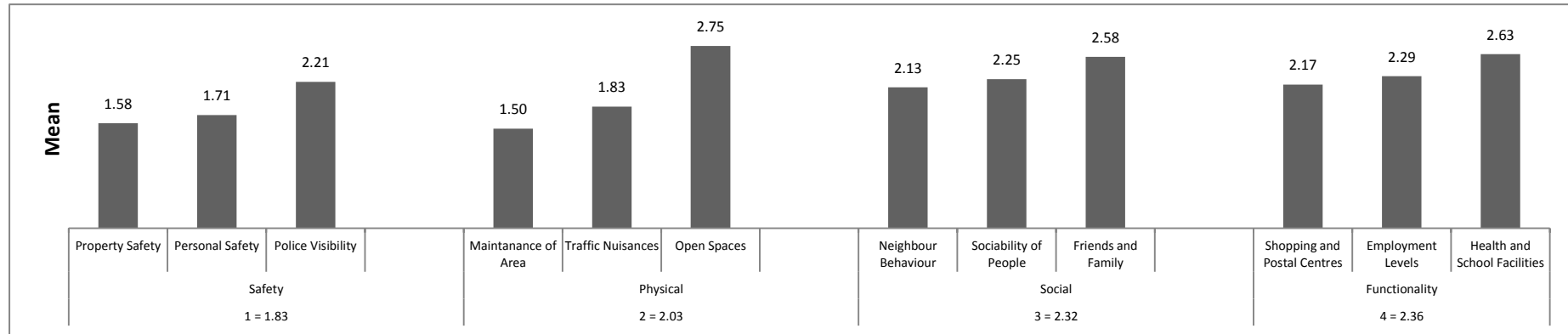
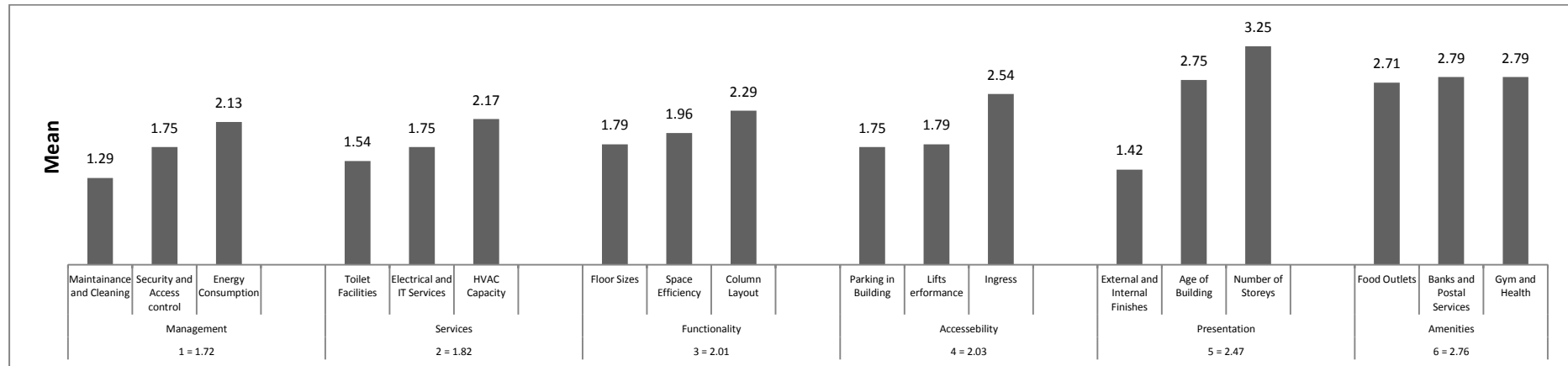


Figure 1b: Means and Ranks for Building Attributes

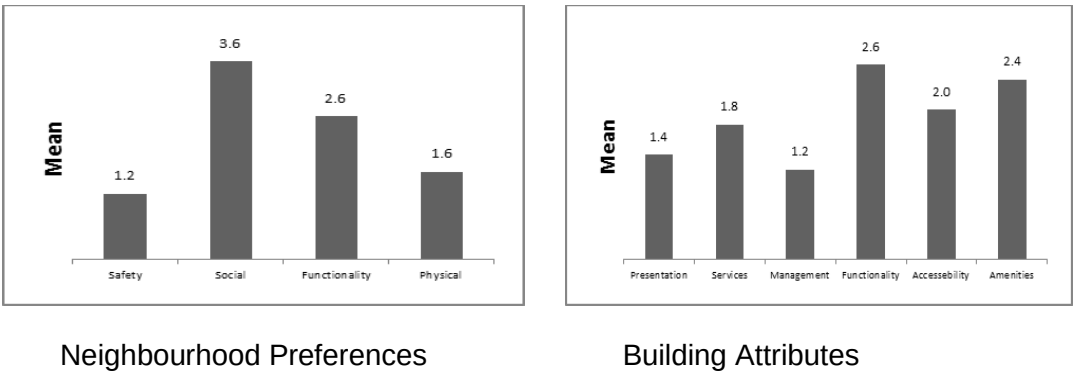


Relative Importance of Factors by Group

Investors

Figure 2a Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by Institutional Investors. They picked Safety (1.2) as the most important factor for neighbourhood preference and Social (3.6) as the least important. For Building Attributes they picked Management (1.4) as the most important and Functionality (2.6) as the least important.

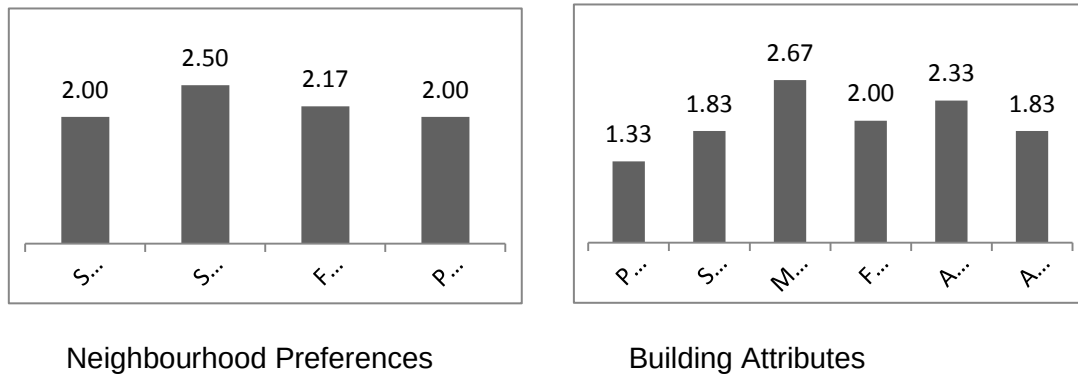
Figure 2a: Means for Neighbourhood Preference and Building Attributes indicated by Institutional Investors



Government

Figure 2b Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by government. They picked Safety (2.0) as the most important factor for neighbourhood preference and Social (2.5) as the least important. For Building Attributes they picked Management (1.0) as the most important and Functionality (2.7) as the least important.

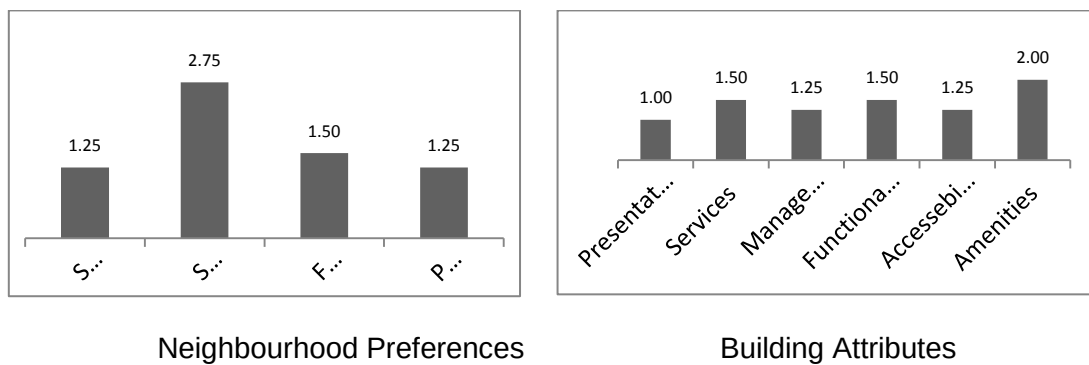
Figure 2b: Means for Neighbourhood Preference and Building Attributes indicated by Government Institutions



Occupiers

Figure 2c Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by occupiers. They picked Safety (1.3) as the most important factor for neighbourhood preference and Social (2.5) as the least important. For Building Attributes they picked Management (1.3) as the most important and Functionality and Service share (1.5) as the least important.

Figure 2c: Means for Neighbourhood Preference and Building Attributes indicated by Occupiers

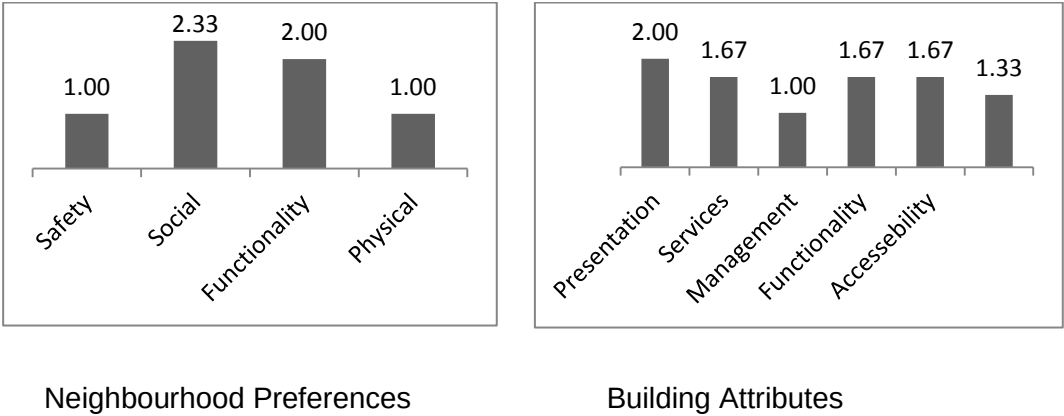


Designers

Figure 2d Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by Designers. They picked Safety and Physicality share (1.0)

as the most important factor for neighbourhood preference and Social (2.3) as the least important. For Building Attributes they picked Management (1.0) as the most important and Functionality, Services and Accessibility share (1.7) as the least important.

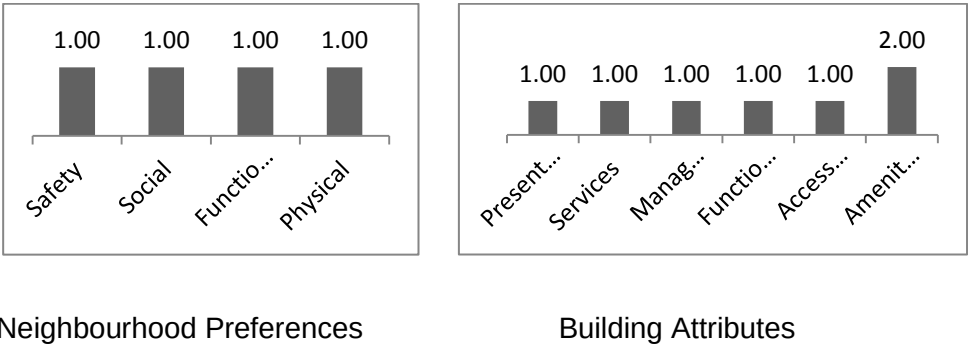
Figure 2d: Means for Neighbourhood Preference and Building Attributes indicated by Designers



Developers

Figure 2e Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by Developers. They picked all factors (1.0) as the most important factor for neighbourhood preference. For Building Attributes they picked all(1.0) as the most important except for Amenities (2.0) as the least important.

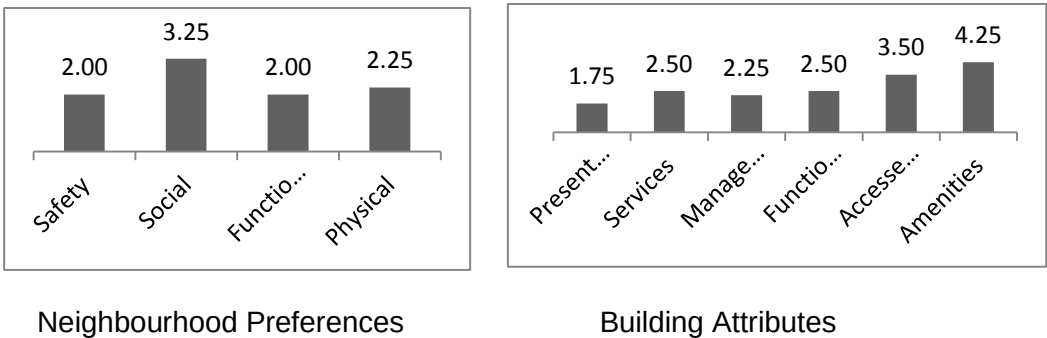
Figure 2e: Means for Neighbourhood Preference and Building Attributes indicated by Developers



Managing

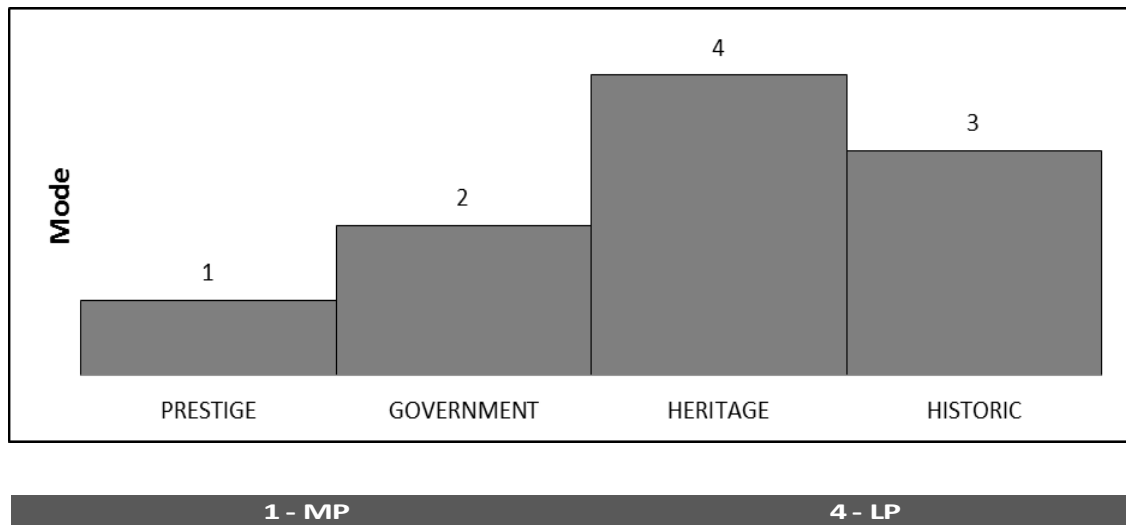
Figure 2f Illustrates the means for Neighbourhood Preference and Building Attributes as indicated by Managing. They picked Safety and Functionality share (2.0) as the most important factor for neighbourhood preference and Social (3.3) as the least important. For Building Attributes they picked Management (1.8) as the most important and Amenities (4.3) as the least important.

Figure 2f: Means for Neighbourhood Preference and Building Attributes indicated by Managing



APPENDIX B:
Preferred Precinct

Figure 3a: Mode for Location Choice - Preferred Precinct in Pretoria CBD



APPENDIX C:
Questionnaire



- RESEARCH QUESTIONNAIRE -

PROPOSED TITLE

(The Importance of Government Property Portfolio: Neighbourhood Preferences, Building Attributes and Office Location in Pretoria)

by

Mathemba Mosery
0707177A

Submitted in partial fulfilment of the requirements for the degree

M Sc. Building (Property Development and Management)

in the

FACULTY OF CONSTRUCTION ECONOMICS AND MANAGEMENT SCIENCES

at the

UNIVERSITY OF WITWATERSRAND

Date of submission

(August 2016)

Please complete all questions before the 30 September 2016, this questionnaire will be fetched from you. The outputs will assist me on my dissertation. Feel free to answer all questions fully and with honesty. Note that no names of organisations or individuals participation will be disclosed in the report.

Organisation Name	
Title and Capacity (Role)	

SECTION 1: Organisation Information

1.	Is your organisation Private, Public or Government	
2.	What is the main business of your organisation	
3.	What is the size of your organisation: ▪ Assets under management ▪ Number of employees ▪ Turn-Over	

SECTION 2: Neighbourhood Preferences

Please mark the appropriate block "X"

1	2	3	4	5
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ITEM NO.	QUESTIONS	RATINGS																														
1.	Question: How would you categorise your organisations role within the office sector in the Pretoria Metro? Comments 	<table border="1"> <tr><td>1</td><td>Own Assets</td></tr> <tr><td>2</td><td>Owner Occupier</td></tr> <tr><td>3</td><td>Institutional Investor</td></tr> <tr><td>4</td><td>Individual Investor</td></tr> <tr><td>5</td><td>Developer</td></tr> <tr><td>6</td><td>Designer</td></tr> <tr><td>7</td><td>Managing</td></tr> </table>	1	Own Assets	2	Owner Occupier	3	Institutional Investor	4	Individual Investor	5	Developer	6	Designer	7	Managing																
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5	Developer																															
6	Designer																															
7	Managing																															
2.	Question: With respect to <u>Neighbourhood Preference</u>, how would you rate the following in order of preferences? SAFETY: pertaining to personal safety, property safety and police and security guards visibility in the neighbourhood SOCIAL: pertaining neighbours behaviour and relationship; sociability, cordiality, friendship and sense of the people; and distance from friends. FUNCTIONALITY: pertaining to health and school facilities, shopping and postal centres; employment level and opportunities. PHYSICAL: pertaining to maintenance and collection of rubbish on streets and open arears; traffic nuisance; and provision of	<table border="1"> <tr> <td>1 -</td><td>Very Important</td></tr> <tr> <td>2 -</td><td>Important</td></tr> <tr> <td>3 -</td><td>Moderately Important</td></tr> <tr> <td>4 -</td><td>Slightly Important</td></tr> <tr> <td>5 -</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1 -	Very Important	2 -	Important	3 -	Moderately Important	4 -	Slightly Important	5 -	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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	open spaces. Comments 																										
3.	Question: From Neighbourhood <u>safety factors</u>, how would you rate the following in order of preferences? PERSONAL SAFETY: with regards to feeling personally safe. PROPERTY SAFETY: with regards to feeling your property and possessions are safe. POLICE VISIBILITY: with regards to police and security guards visibility. Comments 	<table border="1"> <tr> <td>0 =</td><td>Not Important</td></tr> <tr> <td>1 =</td><td>Little Important</td></tr> <tr> <td>2 =</td><td>Average Important</td></tr> <tr> <td>3 =</td><td>Very Important</td></tr> <tr> <td>4 =</td><td>Extremely Essential</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	0 =	Not Important	1 =	Little Important	2 =	Average Important	3 =	Very Important	4 =	Extremely Essential	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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4.	Question: From Neighbourhood <u>social factors</u>, how would you rate the following in order of preferences? NEIGHBOUR BEHAVIOR: with regards to attitude, behaviour and relationship of your work neighbours. SOICIABILITY OF PEOPLE: with regards to cordiality, friendship and sense of the people, within the	<table border="1"> <tr> <td>0 =</td><td>Not Important</td></tr> <tr> <td>1 =</td><td>Little Important</td></tr> <tr> <td>2 =</td><td>Average Important</td></tr> <tr> <td>3 =</td><td>Very Important</td></tr> <tr> <td>4 =</td><td>Absolutely Essential</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	0 =	Not Important	1 =	Little Important	2 =	Average Important	3 =	Very Important	4 =	Absolutely Essential	1	2	3	4	5	1	2	3	4	5					
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	work environment FRIENDS AND FAMILY: with regards to distance from friends and family. Comments 	<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	2	3	4	5																									
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5.	Question: From Neighbourhood <u>functional factors</u>, how would you rate the following in order of preferences? HEALTH AND SHOOOL FACILITIES: with regards to health and school facilities. SHOPPING AND POSTAL CENTRES: with regards to shopping and postal centres. EMPLOYMENT LEVELS: with regards to employment level and opportunities. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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6.	Question: From Neighbourhood <u>physical factors</u>, how would you rate the following in order of preferences? MAINTENANCE OF AREA: with regards to maintenance and collection of rubbish on streets and open arears.	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5										
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	TRAFFIC NUISANCES: with regards to traffic nuisance. OPEN SPACES: with regards to availability and provision of open spaces. Comments 	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table> <table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5	1	2	3	4	5
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7.	Question: Please mark with 1 - 4, the following in order of importance to your organisation. PRESTIGE: Locating in a building or near a building of prestigious importance HERITAGE: Locating in a building or near a building of heritage importance HISTORIC: Locating in a building or near a building of historic importance. GOVERNMENT: Locating in a building or near a building of government importance Comments 	<table border="1"> <tr> <td>1 -</td> <td>Being the most preferred</td> </tr> <tr> <td>4 -</td> <td>Being the least preferred</td> </tr> </table> <table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	1 -	Being the most preferred	4 -	Being the least preferred						
1 -	Being the most preferred											
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SECTION 3: Building Attributes

Please mark the appropriate block "X"

1	2	3	4	5
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ITEM NO.	QUESTIONS	RATINGS																														
8.	Question: With respect to <u>Building Attributes</u>, how would you rate the following in order of preferences? PRESENTATION: with regards to external and internal finishes (façade, identity, entrance, foyer, common areas), number of storeys, and age of building SERVICES: with regards to toilet facilities; electrical and IT services; and HVAC control and capacity. MANAGEMENT: with regards to maintenance and cleaning services, security and access control, and energy consumption. FUNCTIONAL: with regards to floor sizes; column layout and sub divisibility; and space efficiency. ACESSES AND CIRCULATION: with regards to lifts (passenger and goods); parking in building; and ingress of persons and cars. AMENITIES: with regards to bank, laundry, pharmaceutical and other services; gym and health clubs; and restaurant, kitchen and food outlets. Comments 	1 - Very Important 2 - Important 3 - Moderately Important 4 - Slightly Important 5 - Not Important <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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9.	Question: With respect to Building <u>presentation factors</u>, how would you rate the following in order of preferences? EXTERNAL AND INTERNAL FINISHES: with regards to external (façade and identity) and internal (entrance, foyer and common areas) finishes NUMBER OF STOREYS: with regards to low or high rise building, or number of floors. AGE OF BUILDING with regards to whether the building is old or new. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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10.	Question: With respect to Building <u>services factors</u>, how would you rate the following in order of preferences? TOILET FACILITIES: with regards to availability and cleanliness. ELECTRICAL AND IT SERVICES: with regards to lighting and bandwidth. HVAC CAPACITY: with regards to HVAC control and capacity. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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11.	Question: With respect to Building <u>management factors</u>, how would you rate the following in order of preferences? MAINTENANCE AND CLEANING: with regards to callouts and cleanliness of building. SECURITY AND ACCESSE CONTROL: with regards to urgency and ease. ENERGY CONSUMPTION: with regards to energy conservancy Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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12.	Question: With respect to Building <u>functionality factors</u>, how would you rate the following in order of preferences? FLOOR SIZES: with regards to available space for work stations. COLUMN LAYOUT: with regards to column layout, sub divisibility and flexibility of space. SPACE EFFICIENCY: with regards to space efficiency and number of work stations. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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13.	Question: With respect to Building <u>access and circulation factors</u>, how would you rate the following in order of preferences? LIFTS PERFORMANCE: with regards to lifts loading and control (passenger and goods). PARKING IN BUILDING: with regards to number and availability. INGRESS: with regards to ingress of persons and cars. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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14.	Question: With respect to Building <u>amenities factors</u>, how would you rate the following in order of preferences? BANKS AND POSTAL SERVICES: with regards to bank, laundry, pharmaceuticals and other services. GYM AND HEALTH CLUB: with regards to gym and health clubs. FOOD OUTLETS: with regards to restaurant, kitchen and food outlets. Comments 	<table border="1"> <tr> <td>1</td><td>-</td><td>Very Important</td></tr> <tr> <td>2</td><td>-</td><td>Important</td></tr> <tr> <td>3</td><td>-</td><td>Moderately Important</td></tr> <tr> <td>4</td><td>-</td><td>Slightly Important</td></tr> <tr> <td>5</td><td>-</td><td>Not Important</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table> <table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> </table>	1	-	Very Important	2	-	Important	3	-	Moderately Important	4	-	Slightly Important	5	-	Not Important	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
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SECTION 5: Office Space Requirements

Please mark the appropriate block "X"

1	2	3	4	5
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15.	Question: What <u>office space size</u> does your organisation currently occupy? Comments 	<table border="1"> <tr><td>1</td><td>=</td><td>0 - 250 m2</td></tr> <tr><td>2</td><td>=</td><td>0 - 350 m2</td></tr> <tr><td>3</td><td>=</td><td>> = 1000 m2</td></tr> <tr><td>4</td><td>=</td><td>> = 2500 m2</td></tr> <tr><td>5</td><td>=</td><td>Do not know</td></tr> </table>	1	=	0 - 250 m2	2	=	0 - 350 m2	3	=	> = 1000 m2	4	=	> = 2500 m2	5	=	Do not know
1	=	0 - 250 m2															
2	=	0 - 350 m2															
3	=	> = 1000 m2															
4	=	> = 2500 m2															
5	=	Do not know															
16.	Question: What <u>office space size</u> does your organisation require? Comments 	<table border="1"> <tr><td>1</td><td>=</td><td>0 - 250 m2</td></tr> <tr><td>2</td><td>=</td><td>0 - 350 m2</td></tr> <tr><td>3</td><td>=</td><td>> = 1000 m2</td></tr> <tr><td>4</td><td>=</td><td>> = 2500 m2</td></tr> <tr><td>5</td><td>=</td><td>Do not know</td></tr> </table>	1	=	0 - 250 m2	2	=	0 - 350 m2	3	=	> = 1000 m2	4	=	> = 2500 m2	5	=	Do not know
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2	=	0 - 350 m2															
3	=	> = 1000 m2															
4	=	> = 2500 m2															
5	=	Do not know															
17.	Question: what <u>age of building</u> does your organisation occupy? Comments 	<table border="1"> <tr><td>1</td><td>=</td><td>< = 15</td></tr> <tr><td>2</td><td>=</td><td>> 15, but < = 35</td></tr> <tr><td>3</td><td>=</td><td>> 35, but < = 75</td></tr> <tr><td>4</td><td>=</td><td>> 75</td></tr> <tr><td>5</td><td>=</td><td>Do not know</td></tr> </table>	1	=	< = 15	2	=	> 15, but < = 35	3	=	> 35, but < = 75	4	=	> 75	5	=	Do not know
1	=	< = 15															
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3	=	> 35, but < = 75															
4	=	> 75															
5	=	Do not know															
18.	Question: what <u>age of building</u> does your organisation require? Comments 	<table border="1"> <tr><td>1</td><td>=</td><td>< = 15</td></tr> <tr><td>2</td><td>=</td><td>> 15, but < = 35</td></tr> <tr><td>3</td><td>=</td><td>> 35, but < = 75</td></tr> <tr><td>4</td><td>=</td><td>> 75</td></tr> <tr><td>5</td><td>=</td><td>Do not know</td></tr> </table>	1	=	< = 15	2	=	> 15, but < = 35	3	=	> 35, but < = 75	4	=	> 75	5	=	Do not know
1	=	< = 15															
2	=	> 15, but < = 35															
3	=	> 35, but < = 75															
4	=	> 75															
5	=	Do not know															
19.	Question: Is the office space occupied by your organisation adequate?	Yes No															

	Comments 	
20. .	Question: would your organisation or firm locate in the CBD of Pretoria? Comments 	Yes No
21.	Question: There is plenty available / or How would you describe the following? Please indicate the most appropriate? Public transport: within walking distance from the office. Parking around: within walking distance from the office. Cleanliness around: property and facilities management in the CBD of Pretoria Safety: visibility of law enforcement and I feel safe when I am around the CBD of Pretoria. Comments 	1 - Strongly Agree 2 - Agree 3 - Undecided 4 - Disagree 5 - Strongly disagree 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5

SECTION 4: Demographics Information

Please fill the appropriate block

22.	Race: – Black – Coloured – India – Whites – Other:	<table border="1"><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table> Specify: 															
23.	Age:	<table border="1"><tr><td>1</td><td>=</td><td>18 - 24</td></tr><tr><td>2</td><td>=</td><td>25 - 34</td></tr><tr><td>3</td><td>=</td><td>35 - 50</td></tr><tr><td>4</td><td>=</td><td>49 - 65</td></tr><tr><td>5</td><td>=</td><td>> 65</td></tr></table>	1	=	18 - 24	2	=	25 - 34	3	=	35 - 50	4	=	49 - 65	5	=	> 65
1	=	18 - 24															
2	=	25 - 34															
3	=	35 - 50															
4	=	49 - 65															
5	=	> 65															
24.	Gender:	<table><tr><td>Female</td><td>Male</td></tr><tr><td>☐</td><td>☐</td></tr></table>	Female	Male	☐	☐											
Female	Male																
☐	☐																
25.	Education: – National Certificate (Matric) – National Diploma – Degree – Post Graduate Degree – PhD / Doctoral Degree – Other:	<table border="1"><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table> Specify: 															

26.	Please state your years of experience: – 0 to 2 Years – 2 to 5 Years – 5 to 10 Years – 10 to 15 Years – 15 Years and above	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>					
27.	Income per month: – R 0 to R 3 500.00 – R 3 500.00 to R 10 000.00 – R 10 000.00 to R 30 000.00 – R 30 000.00 to R 50 000.00 – R 50 000.00 and above	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td></td></tr> </table>					