

***AN INVESTIGATION OF RESIDENTIAL-BASED BUSINESS AS AN
ALTERNATIVE FOR SMALL- AND MEDIUM-SIZED ENTERPRISES***

by

MOLEBALESO LYDIA NTSHINGILA

Research submitted for the Degree

Philosophiae Doctor

In

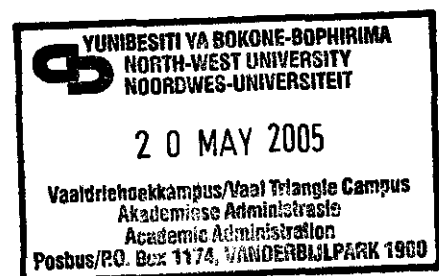
The Department of Business Management at the North-West

University

(Vaal Triangle Campus)

PROMOTER: Prof. P.F. Venter

October 2004



ACKNOWLEDGEMENTS

I wish to acknowledge the contributions of the following persons i.r.o. my research.

- The Almighty God for giving me life and making it possible for me to produce this work.
- Mrs C. Mbonelwa for her assistance.
- Prof. P.F. Venter, my promoter, for his support and encouragement throughout my research.
- All anonymous respondents who honestly and reliably completed the questionnaires.
- The late Mrs Vermeulen and Mrs M. Bosman, for their able typing of this manuscript, regardless of the often-illegible handwriting and many figures and tables.
- Dr J.C. Huebsch, a language expert for professionally editing the whole thesis.
- Mrs A. Oosthuyzen, for her professional assistance in respect of the statistical analyses in this study.
- My children, Mathabo, Lerato and Zanele, who gave me the freedom to complete this study.
- My loving husband, Bongani, for his continued motivation and support throughout my research.

DECLARATION

I declare that

AN INVESTIGATION OF RESIDENTIAL-BASED BUSINESSES AS AN ALTERNATIVE FOR SMALL- AND MEDIUM-SIZED ENTERPRISES

is my own work, that all the sources used or quoted, have been indicated and acknowledged by means of complete references, and that I did not previously submit this thesis for any degree at any other university.

Molebaleso Lydia Ntshingila

October 2004

SUMMARY

AN INVESTIGATION OF RESIDENTIAL-BASED BUSINESSES AS AN ALTERNATIVE FOR SMALL- AND MEDIUM-SIZED ENTERPRISES

by

Molebaleso Lydia Ntshingila

Promoter : Prof. P.F. Venter
Department : Business Management
Degree : Philosophiae Doctor Commercii

Home-based and residential-based businesses have become a visible feature on some main road arteries in and out of most suburbs and big cities in South Africa. Previous residential zoned properties are being used for business purposes, to such an extent, that certain main routes into cities have virtually lost their residential character.

The home-based business concept is not new to South Africa. Approximately 1,8 million people run some form of business from home. However, the purchase or rental of a residential property to be re-zoned for business use in some specific areas, seem to be a new phenomenon.

Preliminary interviews with entrepreneurs and small business owners of these residential-based businesses, would indicate that it is an alternative location to shopping centres/malls and office parks. They are often harassed by landlords and/or cannot afford the rentals charged or cannot comply with certain aspects of the lease agreement.

The study is an exploratory research into this phenomenon and is supported by a proper literature study, as well as by an empirical study.

The literature reviews the concepts of entrepreneurship and small, medium and micro enterprises (SMME's) as a starting point for this study. This sector is a vital contributing factor to any economy and one of the most important strategic decisions that must be made by these small business ventures, is the location-decision. All the theories and factors of location in literature, reveal this important decision and the different types of location for SMME's are explored, with emphasis on the newest phenomenon of residential-based businesses.

The empirical part of the study consists of a questionnaire that was completed by means of personal interviews on a sample in the greater Pretoria metropolitan region. The objective of this study, was to find the reasons for this visible development in suburbs and to investigate whether this is an effective alternative location for SMME's.

The research findings indicated the reasons and advantages of residential-based businesses, as well as the possible problems and disadvantages of this location-decision. The three factors identified as advantages, are the location and growth advantages, the cost advantages and the personal advantages. The three disadvantage factors are various personal drawbacks, local authorities' rules and regulations and several management disadvantages. Specific recommendations are made on how to run and manage such a residential-based business and the thesis will therefore, be of value not only to entrepreneurs and SMME's wanting to make this important location-decision, but also to town planners at city councils i.r.o. future strategic planning.

OPSOMMING

**AN INVESTIGATION OF RESIDENTIAL-BASED BUSINESSES AS AN ALTERNATIVE
FOR SMALL- AND MEDIUM-SIZED ENTERPRISES**

**'N ONDERSOEK NA RESIDENSIEEL-GEBASEERDE SAKE AS 'N ALTERNATIEF VIR
KLEIN- EN MEDIUM-SAKEONDERNEMINGS**

Deur

Molebaleso Lydia Ntshingila

Promotor : Prof. P.F. Venter
Departement : Ondernemingsbestuur
Graad : Philosophiae Doctor Commercii

Tuis-gebaseerde en residensiële-gebaseerde ondernemings het 'n baie sigbare en duidelike verskynsel geword in verskeie Suid-Afrikaanse stede se hoof-toegangsroetes. Verskeie residensiële woongebiede is in so 'n mate omskep in residensiële besighede, dat die gehele woongebied sy voorkoms en karakter as woongebied verloor het.

Tuis-gebaseerde ondernemings is nie nuut in Suid-Afrika nie. Sowat 1,8 miljoen mense bedryf een of ander besigheid vanuit 'n huis. Die koop of huur van eiendom en die hersonering daarvan in besigheidsregte in sekere woongebiede, is egter 'n heelwat nuwer verskynsel.

Voorafbepaalde onderhoude met entrepreneurs en eienaars van sulke kleinsake-ondernemings het aangetoon, dat so 'n ligging 'n alternatiewe opsie is vir winkelsentrums en kantoorparke. Eienaars word i.v.m. laasgenoemde gereeld onbillik behandel, kan nie die huur bekostig nie of selfs nie sekere van die huurooreenkomste in die huurkontrak nakom nie.

Hierdie studie is 'n ondersoekende studie m.b.t. hierdie nuwe verskynsel en word gerugsteun deur 'n omvattende literatuurstudie, sowel as 'n empiriese ondersoek.

Die literatuur bied 'n oorsig oor entrepreneurskap en klein, medium en mikro ondernemings (KMMO's) as beginpunt van hierdie studie. Hierdie sektor lewer 'n baie belangrike bydraende faktor tot enige ekonomie en een van die belangrikste strategiese besluite wat so 'n onderneming moet maak, is die liggingsbesluit. Al die teorieë en faktore van ligging in die literatuur, erken hierdie belangrike besluit en al die verskillende soorte inligting vir KMMO's word ondersoek, met die klem op veral die nuutste verskynsel, naamlik residensieel-gebaseerde ondernemings.

Die empiriese gedeelte van hierdie studie bestaan uit 'n vraelys wat deur middel van persoonlike onderhoude beantwoord is deur 'n steekproef gedoen in die groter Pretoria Metropolitaanse gebied. Die doelwit van hierdie studie, is om die redes vir hierdie nuwe sigbare ontwikkeling te verklaar en om vas te stel of dit 'n moontlike alternatief is vir die ligging van KMMO's.

Die navorsingsbevindinge toon die redes en voordele van residensieel-gebaseerde ondernemings, sowel as die probleme en nadele van hierdie liggingsbesluit. Die belangrikste voordele wat uit die faktor-analise na vore getree het, is liggings- en groeivoordele, koste-voordele en persoonlike voordele. Die nadele wat geïdentifiseer is, is verskeie persoonlike nadele, reëls van plaaslike owerhede en regulasies sowel as bestuursnadele. Volledige aanbevelings word gemaak oor hoe om so 'n residensieel-gebaseerde onderneming suksesvol te bestuur en die studie is dus nie net van waarde vir entrepreneurs en KMMO's wat hierdie liggingsbesluit oorweeg nie, maar ook vir stadsbeplanners by stadsrade vir toekomstige strategiese beplanning.

TABLE OF CONTENTS

	Page
Acknowledgements	i
Declaration	ii
Summary	iii
Opsomming	v
Table of Contents	vii
List of Figures	xiii
List of Tables	xiv

CHAPTER 1 INTRODUCTION AND SCOPE OF THE STUDY

1.1	Introduction	1
1.2	Literature review	1
1.3	Background and importance of the study	3
1.4	Definition of the research problem	5
1.5	Purpose of the study	6
1.6	Objectives of the study	6
1.7	Demarcation and method of the study	7
1.8	Structure of the study	7

CHAPTER 2 THE FUNDAMENTALS OF ENTREPRENEURSHIP AND SMALL, MEDIUM AND MICRO ENTERPRISES (SMME's)

2.1	Introduction	9
2.2	Definition of entrepreneurship	10

2.3	The distinction between entrepreneurship and small business management	14
2.3.1	Innovation	16
2.3.2	Potential for growth	16
2.3.3	Strategic objectives	17
2.4	Entrepreneurs as initiators of small business ventures	18
2.5	The role of SMME's in an economy	20
2.5.1	Definitions of SMME's	21
2.5.2	State of small business in South Africa	27
2.5.3	The difference between SMME's and Large Firms	29
2.5.3.1	Uncertainty	29
2.5.3.2	Innovation	31
2.5.3.3	Evolution	31
2.6	Conclusion	31

CHAPTER 3 THE ENVIRONMENT

3.1	Introduction	33
3.2	The acquisition of resources for SMME's	35
3.3	The structure of SMME's	36
3.4	Managerial influence and control of SMME's	37
3.5	Importance of SMME's	40
3.6	Advantages and disadvantages of SMME's	44
3.6.1	Advantages	44
3.6.2	Disadvantages	46

3.7	Location-decision as an essential part of SMME's survival	48
3.8	Conclusion	49
 CHAPTER 4 LOCATION THEORY		
4.1	Introduction	51
4.2	The theory of location	53
4.3	Location theories	54
4.3.1	Least-cost theory	54
4.3.2	The demand approach (location interdependence)	55
4.3.3	Theory of the maximum-profit plant location	55
4.3.4	Large versus small firms and price systems theories	56
4.4	Relevance of location theories	56
4.5	Conducting the business location search	57
4.5.1	Relocation versus expansion	58
4.6	Location considerations	59
4.7	Location factors as revealed by theoretical and empirical studies	61
4.8	Location factor concepts	66
4.9	Various location factors	68
4.10	The location decision	80
4.11	Quantifying the location decision	83
4.11.1	Evaluating location by means of the mathematical method SLAM	85
4.11.2	The SLAM modelling process	87
4.11.3	Implications of the SLAM Model	88

4.12	Summary	91
------	---------	----

CHAPTER 5 TYPES OF LOCATIONS FOR THE SMME'S THEORY

5.1	Introduction	93
5.2	Central business district (CBD)	94
5.3	Shopping centres/malls	94
5.4	Office blocks	96
5.5	Industrial parks	97
5.6	Home-based business	98
5.7	Telecommuting	102
5.8	Residential-based business	104
5.9	Conclusion	107

CHAPTER 6 RESEARCH METHODOLOGY

6.1	Introduction	108
6.2	Definition of problem, objectives and data required	108
6.2.1	Problem definition	108
6.2.2	Objectives of the study	109
6.2.3	Data required	109
6.2.4	Method of data collection	111
6.3	Analysis	115
6.3.1	Tables	115
6.3.2	Validity and reliability	115
6.3.2.1	Cronbach's Alpha	119

6.4	Factor analysis	120
6.5	Cross-tabulation	122
6.6	Conclusion	122

CHAPTER 7 RESEARCH FINDINGS

7.1	Introduction	123
7.2	Demographic information	123
7.2.1	Gender and age	123
7.2.2	Qualification and position in the business	124
7.3	Ownership and SMME information	125
7.3.1	Form of residential-based business	126
7.3.2	SMME sector according to SIC	126
7.3.3	Employees and turnover	128
7.4	Location characteristics	129
7.4.1	Property characteristics	129
7.4.2	Previous location	130
7.4.3	Factors/reasons/advantages of managing a residential-based business	131
7.4.4	Factors/problems/disadvantages of managing a residential-based business	134
7.4.5	Residential-based businesses growth figures	136
7.4.6	Specific advantages of residential-based business	138
7.4.7	Specific disadvantages of residential-based business	139
7.4.8	Actions and recommendations	141

7.5	Reliability testing	142
7.5.1	Reliability – Reasons/Advantages of residential-based business	143
7.5.2	Reliability – Problems/Disadvantages of residential-based business	144
7.6	Factor analysis	144
7.6.1	Factor analysis on reasons/advantages of residential-based businesses	145
7.6.1.1	Factor 1. Location and growth advantages	146
7.6.1.2	Factor 2. Cost advantages	146
7.6.1.3	Factor 3. Personal advantages	147
7.6.2	Factor analysis on problems/disadvantages of residential-based businesses	147
7.6.2.1	Factor 1. Personal disadvantages	148
7.6.2.2	Factor 2. Local authorities' rules and regulations	148
7.6.2.3	Factor 3. Management disadvantages	149
7.7	Cross tabulations	149
7.7.1	Growth figures	150
 CHAPTER 8 CONCLUSIONS AND RECOMMENDATIONS		
8.1	Introduction	151
8.2	Literature review	151
8.3	Conclusions	154
8.3.1	Demographic characteristics	154
8.3.2	SMME characteristics	155

8.3.3	Property characteristics	156
8.3.4	Factors/reasons/advantages of residential-based businesses	156
8.3.5	Factors/problems/disadvantages of residential-based businesses	157
8.3.6	Residential-based growth figures	158
8.4	Recommendations	159
8.4.1	Recommendations on type of business	159
8.4.2	Recommendations on workforce	160
8.4.3	Recommendations on local authorities	160
8.4.4	Recommendations on managing this location-decision	161
8.5	Final comments	167
8.6	Limitations of the study	167
8.7	Future research	168
LIST OF REFERENCES		169
APPENDIX A		187
APPENDIX B		191
APPENDIX C		198

LIST OF FIGURES

Figure 2.1	Traits of successful entrepreneurs	13
Figure 2.2	Entrepreneurial performance versus time	15
Figure 2.3	Difference between a small business and an entrepreneurial venture	18

Figure 5.1	Contribution of home-based businesses as a percent of all US businesses	98
Figure 6.1	The cumulative questions of validity	117

LIST OF TABLES

Table 3.1	Managing the small firm: controlling and empowerment forces	38
Table 3.2	Survival rate of businesses	46
Table 3.3	Greatest financial obstacles of small businesses	47
Table 4.1	Relative advantages of new locations versus expansion-on-site	58
Table 4.2	Important formal and informal location judgments	79
Table 4.3	A comparison of two location options	84
Table 6.1	Scale types	113
Table 7.1	Gender of respondents	123
Table 7.2:	Age of respondents	124
Table 7.3	Highest educational qualification	124
Table 7.4	Position of respondent in business	125
Table 7.5	Form of residential-based business	126
Table 7.6	Standard Industrial Classification (SIC) of SMME	127
Table 7.7	More detailed classification of SMME's	128
Table 7.8	Full-time employees	128
Table 7.9	Annual turnover	129
Table 7.10	Owning versus renting of property	129
Table 7.11	Rezoning of property	130

Table 7.12	Previous location of business	130
Table 7.13	Reasons/advantages of a residential-based business	132
Table 7.14	Problems/disadvantages of a residential-based business	135
Table 7.15	Growth in sales/turnover	137
Table 7.16	Growth in customers	137
Table 7.17	Specific advantages of residential-based businesses	138
Table 7.18	Special disadvantages of residential-based businesses	140
Table 7.19	Actions and recommendations	141
Table 7.20	Cronbach Alpha coefficients for reasons/advantages of a residential-based business	143
Table 7.21	Cronbach Alpha coefficient for problems/disadvantages of a residential-based business	144
Table 7.22:	Eigenvalues – explained variance in three-factor solution	145
Table 7.23	Extraction of principal components – Factor 1	146
Table 7.24	Extraction of principal components – Factor 2	147
Table 7.25	Extraction of principal components – Factor 3	147
Table 7.26	Eigenvalues – explained variance in three factor solution	147
Table 7.27	Extraction of principal components – Factor 1	148
Table 7.28	Extraction of principal components – Factor 2	149
Table 7.29	Extraction of principal components – Factor 3	149
Table 7.30	Cross-tabulation regarding growth in the residential-based business	150

CHAPTER 1

INTRODUCTION AND SCOPE OF THE STUDY

1.1 INTRODUCTION

More than 30 million Americans are currently working from home, while the figure is still rising. This trend is happening not only i.r.o. this world leader, but is almost old news in most developed countries, including South Africa. These are generally known as “home-based businesses”, where a certain floor area is being utilised as an office or even consulting rooms and small stores. But the latest trend which has developed from this phenomenon, is where a whole residential property is being utilised as a small business venture, without residents permanently occupying the property (Kilby, 1971:28).

The trend towards out-of-town living (moving away from the city centres), brings with it the necessity to travel long distances to and from work, often in heavy traffic. Escalating office and shop rentals contribute to this problem, while the emergence of the “virtual office” also makes the options for the entrepreneur of the location-decision even more important (Sheedy, 1994:xiii).

Although the residential office option is becoming increasingly popular, prospective entrepreneurs would be well advised to carefully consider the pros and cons before making a decision that could either make or break their new venture. To consider the feasibility of such a location-decision and in order to develop a framework and recommendations for these entrepreneurs, aspects like the kind of business, local authorities' rules and regulations, advantages, disadvantages and other factors will be explored in this dissertation, that could easily suggest solutions i.r.o. small businesses' locations.

1.2 LITERATURE REVIEW

The word *entrepreneur* and the concepts derived from it, such as entrepreneurial, entrepreneurship and entrepreneurial process, are frequently encountered in

discussions of the management of new, fast growing, innovative small business ventures. These concepts are easily related. Entrepreneurship is what an entrepreneur actually does. Entrepreneurial refers to the approach they take. The entrepreneurial process is what the entrepreneur engages in (Wickham, 1998:4).

Even though there is usually a failure to pin down the rich and complex phenomenon of entrepreneurship in a universal definition, it is the very variety of entrepreneurship and the endless possibilities that it presents, that makes it so challenging. Entrepreneurship is both a social and an economic phenomenon. The entrepreneur is, first and foremost, an individual who lives and functions within society. Entrepreneurs are characterised not by every action they take, but by a particular set of actions aimed at the creation of new wealth. Entrepreneurship is about value generation (Wickham, 1998:6).

Both entrepreneurship and small business management are of critical importance to the performance of the economy. However, it is useful to draw a distinction between them, since small business and entrepreneurial ventures serve different economic functions. They pursue and create new opportunities differently, they fulfil the ambitions of their founders and managers in different ways and they present different challenges to economic policy makers. Drawing this distinction, is an issue of classification which is discussed in the literature chapters (Wickham, 1998:18).

During the last two decades, small, medium and micro enterprises (SMME's) all over the world have changed their locations for a variety of reasons. The extensive degree of investment in new locations, indicates the significance of location decisions (Karakaya & Canel, 1998:321).

One of the most important decisions any manager will ever make – whether running a multibillion rand conglomerate or a neighbourhood clothing store – is the decision to move the business or any part of it. Whether it means shifting a plant, an office, a warehouse or a showroom, anyone who faces such a decision, must live with the consequences. Moving a business is obviously more than just packing up the files and the computers, calling a truck and setting up your business somewhere new. The multitude of factors that go into a decision to move, demands that the executive

consider all the relevant location factors concerning the enterprise and then classify them into required and desirable criteria.

Required criteria are those that must exist; if the location does not have all of the required criteria, it should not be considered an option. The *desirable criteria*, however, are those that you would like to have, but they are not essential for the success of the business. Each industry has location factors that are unique; factors that are important for a retail site are often irrelevant to a manufacturing firm.

Also zoning laws constitute a factor for any business and should be researched early in the site selection process. These laws are established by communities and local governments to control the type of businesses that are opened and to ensure that the community development occurs in a well-planned manner. If a site is not zoned for the type of business the entrepreneur wishes to open, local government will determine if the property should be rezoned to the new classification.

The entrepreneur and small business are, therefore, confronted with various different options of location of which the residential-based location has become an increasingly popular option. The empirical part of this study will investigate the viability of this location-decision, with all its dimensions.

1.3 BACKGROUND AND IMPORTANCE OF THE STUDY

Before the developments of the railroads and communication systems in the world, economies depended on people working from their residences. The number of these businesses, referred to as *cottage industries*, decreased during the past 100 years as industrial parks, office complexes and shopping centres became the norm. However, the trend has now come full circle, and residential-based businesses are once again becoming more and more common.

This phenomenon is increasingly growing in numbers in South Africa. More and more small businesses are starting to open or to move their business to a residential property – this happens because of various reasons. Firstly, the electronic revolution, with the development of the internet and other forms of technology, make it possible for

businesses to operate from virtually any location. Secondly, the increasing, and sometimes unaffordable high rent of office blocks, shopping centres and other locations, make entrepreneurs and small business reconsider the importance of the location-decision (Lambing & Kuehl, 1997:52). Many other technological and economic reasons are being explored in this research study.

But it is not only technology and economics that created this residential-based business phenomenon. It is also generated by a growing need for independence and the creation of an image that will differentiate the small business from its competitors. The opportunities at a residential property are endless and the entrepreneur is not bound anymore to the strict rules and regulations of the landlord or shopping centre.

Almost daily, new small businesses begin operating from residential properties and many of them are successful beyond the dreams of their founders. Sadly, many are not. The reality is, that merely saving on the rent, is not enough. Running a business from a residential property, requires the same drive and skills demanded of any other business person – it may require even more.

According to IDC/LINK, a New York-based market research firm, the residential-based businesses in the United States ranges from computer businesses and cleaning services to medical industries and consulting firms. Except for the manufacturing industry, the residential property option is open to almost any small, medium and micro enterprise (Beech, 1997:92).

The importance of this study, therefore, lies in the investigation of this new phenomenon, namely residential-based businesses, and to define, evaluate and develop actions and recommendations for future entrepreneurs by considering this option.

No proper definition currently exists for a residential-based business in South Africa. The best starting point would be to look more specifically at the definition of a home-based business. First of all, a distinct difference can be found between “home-based” and “home-managed”, according to Laurie (1996:21).

Typically, “home-managed” businesses consist of service-orientated businesses where the entrepreneur conducts business at the customer’s location or has to travel. A business can be considered “home-managed” if two out of three main functions needed to run a business, for example, operations and marketing, are performed outside the home office.

The “home-based” business, on the other hand, can be service- or production-orientated, but business is conducted at the entrepreneur’s location and not elsewhere. All the main business functions, therefore, are being managed from home. In both these scenarios the property is being occupied by full-time residents that take up a certain dwelling area inside the home (Laurie, 1996:21).

The residential-based business can, therefore, be defined the same as a home-based business, except that the whole property is being used for business purposes and no full-time occupants are living in the home.

1.4 DEFINITION OF THE RESEARCH PROBLEM

From the above discussion, it is clear that residential-based businesses are starting to create a new phenomenon in the location-decision of SMME’s. While the research problem is discussed in more detail in Chapter 6, it could be summarised by setting the following questions.

- Why is this phenomenon of locating at a residential property becoming increasingly popular?
- Have these small businesses been experiencing any growth in sales and customers since their previous location? (if any)
- There should certainly be many advantages as well as disadvantages of this location-decision. Is it therefore, not only viable, but also advisable, to make this strategic, long-term location-decision for the SMME?
- What specific actions and recommendations are available to prospective entrepreneurs wanting to make this decision?

1.5 PURPOSE OF THE STUDY

The main purpose of the study, is to investigate the role of residential-based businesses as an alternative location-decision for SMME's. More specifically, the following should be investigated and explored.

- The residential-based business phenomenon.
- The future existence of these businesses.
- The problems regarding local authorities.
- The advantages and disadvantages of this location-decision.
- The correct actions to take in order to ensure future success at this location.

1.6 OBJECTIVES OF THE STUDY

One primary objective and five secondary objectives have been identified for this research study. They are the following.

Primary objective

- An investigation of residential-based business as an alternative for small and medium size enterprises.

Secondary objectives

The secondary objectives are to measure –

- the effectiveness of residential-based businesses as location for SMME's;
- what kind of SMME's are likely to make a success of a residential-based location;
- the influence and problems perceived from the local authority regarding a residential-based business; and
- the growth of residential-based businesses.

1.7 DEMARCATION AND METHOD OF THE STUDY

This study consists of a literature study (theoretical), as well as an empirical study.

The literature study provides a better insight into the research problem as well as the necessary background to guide the empirical part of the study. An extensive study of related literature was conducted during this phase of the study.

The empirical study consists of a self-administered questionnaire delivered to the owners/managers of residential-based businesses in the greater Pretoria metropolitan area. This area has been chosen for the study, because of the visual and recognisable nature of these businesses in the main arteries of this region (Duncan, Schoeman, Pretorius, Charles, Soutpansberg, Zambezi and other streets). When the questionnaires were completed, they were coded, the data captured into a statistical software package and analysed by the Department of Statistics at the North-West University (Vaal Triangle Campus).

The research methodology is discussed in more detail in Chapter 6. It should be stated at this point, that the Microsoft package used to write this study, is Microsoft Word 2000 and done in UK English. The reference technique used right through the study, as well as in the bibliography, is the Harvard method of reference.

1.8 STRUCTURE OF THE STUDY

The outline of the study was done in such a way, that it followed in a logical order to build up towards the specific research study and objectives. Each chapter investigates the basic concepts in current literature and then narrows it down to the next section (chapter) in which that specific aspect is discussed. This leads to the empirical study in which the specific research problem and objectives are addressed.

Chapter 2 focuses on the fundamentals of entrepreneurship, as well as on small, medium and micro enterprises (SMME's). Both these concepts are defined, with their specific characteristics and differences. The role of SMME's in an economy and specifically the state of small businesses in South Africa, is also discussed.

Chapter 3 focuses solely on the SMME environment as such, with specific management issues regarding this business sector. The structure and importance of SMME's regarding their survival aspects are emphasized. Specific advantages and disadvantages of SMME's are also investigated. Lastly, the location-decision of SMME's is noted as an essential part of their survival.

Chapter 4 investigates the various location theories developed across the years. The relevance and importance of these theories are discussed as well as the conducting of the location search. Certain considerations are important during this search and all the relevant location factors are discussed in detail. Finally, the location-decision is discussed, as well as methods of how to quantify this location-decision.

Chapter 5 narrows the literature down to the specific research problem, namely the different types of locations for SMME's. The Central Business District (CBD), shopping centres/malls, office blocks, industrial parks, home-based businesses, telecommuting and lastly residential-based businesses, are discussed and evaluated.

Chapter 6 discusses the research methodology in more detail and the specific methods used to gather the empirical information, are outlined. This chapter will also look at the reliability and validity of the study.

Chapter 7 reports all the research findings by means of descriptive research, reliability tests, factor analysis and cross tabulations.

In *Chapter 8* all the conclusions and recommendations of this research study are discussed.

CHAPTER 2

THE FUNDAMENTALS OF ENTREPRENEURSHIP AND SMALL, MEDIUM AND MICRO ENTERPRISES (SMME's)

2.1 INTRODUCTION

A common phrase in the 1960's said: "What's good for General Motors, is good for the United States" (Storey, 1998:1). This may be the case today in many countries where the small business sector regards what is good for small businesses is also good for the country. Even the casual newspaper reader knows about the key role that small firms play in job creation, their contribution to the economy, their role in innovation and the importance that governments attach to small enterprises.

To provide guidance for public policymakers, means that, as the small business sector grows in importance, it is even more necessary than in the past to examine its role in an economic, social and political framework. The role of small businesses in job creation should be seen as part of not only the employment policy, but also as part of the urban and social policy. One central question always, is whether efforts should be made to encourage the unemployed, many of whom may lack business skills, to create their own jobs by allowing them to become self-employed.

The question now arises whether it is reasonable to provide public funds to an individual living in a deprived inner-city area to start his/her own business as a way of creating employment for themselves. In addition, given the risk that the business might fail, they are saddled with a burden of debt, which they are unable to service (Storey, 1998:2).

Whether to encourage the maximum development of small business or not, still remains to be argued, but one cannot forget, that whilst the small firm sector exhibits very high rates of churning – births and deaths – a key element in small firm policy-making, is the extent to which small firms ultimately grow into medium and large firms. This could also then lead to an important strategic location decision for the small enterprise.

This chapter investigates the following.

- The various definitions of entrepreneurs as initiators of small enterprises.
- The distinction between entrepreneurship and small, medium and micro enterprises (SMME's) and the focus of each.
- The role of SMME's in the economy.

2.2 DEFINITION OF ENTREPRENEURSHIP

In a detailed study of this issue, the American entrepreneurship researcher William Gartner (1990) asked fellow academics and business leaders for their definitions of entrepreneurship. From 44 different definitions obtained, some 90 different attributes of entrepreneurship were identified. The definitions were not just variations on a theme; in fact, many shared no common attributes at all. This indicates, that the quest for a universal definition has not moved on much since 1971 when Peter Kilby commented that the entrepreneur had a lot in common with the "Heffalump", a character in A.A. Milne's *Winnie-the-Pooh*, noting that he is also:

" ... a rather large and important animal. He has been hunted by many individuals using various trapping devices, but no one so far has succeeded in capturing him. All who claimed to have caught sight of him report that he is enormous, but disagree on his particularities."

The word *entrepreneur* and the concepts derived from it, such as "entrepreneurial", "entrepreneurship" and "entrepreneurial process" are frequently encountered in discussions of the management of new, fast-growing, innovative small business ventures. These concepts are easily related. Entrepreneurship is what an entrepreneur actually does. Entrepreneurial refers to the approach they take. The entrepreneurial process is what the entrepreneur engages in (Wickham, 1998:4).

This might seem very mediocre, but offering a proper definition of the entrepreneur or entrepreneurship, presents an immediate problem; not because a definition is not available, but because there seem to be too many definitions. Even though economic

and management literature abounds with possible definitions, the problem is, that there does not seem to be much agreement on what the essential features of an entrepreneur are (Wickham, 1998:4).

Even though there usually is a failure to pin down the rich and complex phenomenon of entrepreneurship in a universal definition, it is the very variety of entrepreneurship and the endless possibilities that it presents, that makes it so challenging. Entrepreneurship is a social and economic phenomenon. The entrepreneur is, first and foremost, an individual who lives and functions within society. Entrepreneurs are characterised not by every action they take, but by a particular set of actions aimed at the creation of new wealth. Entrepreneurship is primarily about value generation (Wickham, 1998:6).

Although entrepreneurial activity may be found in various spheres of life, the term is mostly commonly thought of in terms of business life. Most observers use the term in relation to small business or new business ventures. In reality, many established businesses – even giant corporations – engage in entrepreneurship (Bagshawe, 1995:ix). This kind of entrepreneurship inside giant corporations is usually known as intrapreneurship and falls outside the scope of this study.

Entrepreneurship is a particular approach to wealth-generating activity. Entrepreneurs are characterized by the way they go about creating new value. The recognition of this fact, gives us three angles of approach to the entrepreneur, in that he/she might be considered as:

- a manager undertaking an activity – i.e. by means of the particular tasks he/she performs and the way he/she undertakes these;
- an agent of economic change – i.e. by the effects he/she has and the type of changes he/she creates; or as
- an individual – i.e. by means of his/her psychology, personality and personal characteristics.

Each of these three aspects is reflected in the variety of definitions offered for the entrepreneur. The function of each of these definitions is not just to characterize

entrepreneurs but also to distinguish them from other types of people involved in the generation of wealth (such as investors or “ordinary” managers) (Wickham, 1998:6).

Timmons (1994:7) defines entrepreneurship as creating and building something of value from practically nothing. That is, entrepreneurship is the process of creating or seizing an opportunity and pursuing it regardless of the resources currently controlled. Entrepreneurship involves the definition, creation and distribution of value and benefits to individuals, groups, organisations and society. Entrepreneurship is very rarely a get-rich-quick proposition; rather, it is one of building long-term value and durable cash flow streams (Timmons 1994:7).

Timmons (1994:6) further defines entrepreneurship as a human creative act. It involves finding personal energy by initiating and building an enterprise or organisation, rather than by just watching, analysing, or describing one.

Entrepreneurship usually requires a vision and the passion, commitment and motivation to transmit this vision to other stakeholders, such as partners, customers, suppliers, employees and financial brokers. It also requires a willingness to take calculated risks – both personal and financial – and then doing everything possible to influence the odds. Entrepreneurship involves building a team of people with complementary skills and talents; of sensing an opportunity where others see chaos, contradiction and confusion; and of finding, marshalling and controlling resources (often owned by others) to pursue the opportunity (Timmons, 1994:7).

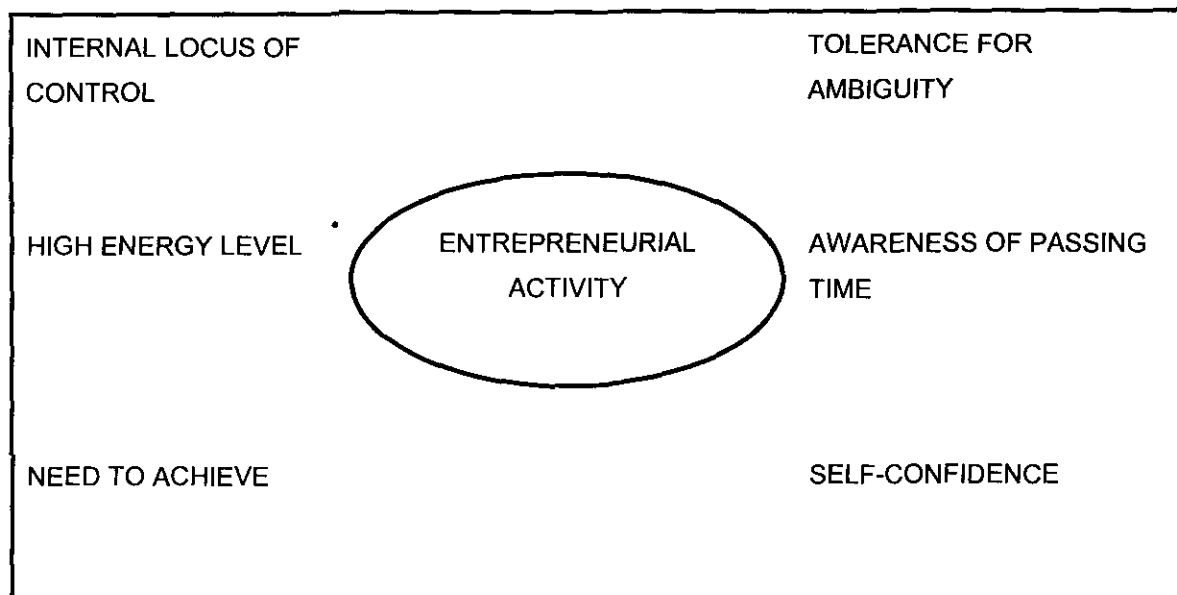
Kuratko & Hodgetts (1998:5) aver, that the characteristics of seeking opportunities, taking risks beyond security and having the tenacity to push an idea through to reality, combine into a special perspective that permeates entrepreneurship.

Timmons (1994:3) furthermore sums up the realities for entrepreneurs: “Anyone (can be an entrepreneur) who wants to experience the deep, dark canyons of uncertainty and ambiguity; and who wants to walk the breathtaking highlands of success. But I caution, do not plan to walk the latter, until you have experienced the former”.

Furthermore, an entrepreneur is a risk-taker in the private enterprise system, a person who seeks a profitable opportunity and takes the necessary risks to set up and operate

a business. Entrepreneurs are also different from other people. Research has identified roughly 40 personality characteristics associated with entrepreneurship (Boone & Kurtz, 1996:121). Figure 2.1 illustrates six traits that appear to be especially important for successful entrepreneurs.

Figure 2.1 Traits of successful entrepreneurs



Source: Boone & Kurtz, 1996:121

The above need to be explained as follows.

- *Internal locus of control.* People with this trait, believe that they can control their own fates namely that the difference between success and failure depends on them.
- *High-energy level.* No doubt, it takes a lot of work to start and build a successful business. Entrepreneurs must be willing and able to work long hours.
- *Need to achieve.* Successful entrepreneurs like to set their own goals and are motivated by the opportunity to achieve them.
- *Tolerance for ambiguity.* Starting a new company is risky, so entrepreneurs must tolerate ambiguous, uncertain situations.

- *Awareness of passing time.* Entrepreneurs tend to be impatient people who like to stay active; they rarely procrastinate.
- *Self-confidence.* Running a business, requires the ability to make decisions and to manage numerous details. Entrepreneurs need to have confidence to handle these challenges, not to mention other challenges that will arise in the future (Boone & Kurtz, 1996:121).

Entrepreneurship is, therefore, more than the mere creation of business. Although this certainly is an important facet, it is not the complete picture, as seen in the above discussion. There are deeper underlying characteristics and traits that differentiate entrepreneurs from the rest and which give birth to successful small enterprises.

As noted above, the definition of entrepreneurship is probably one of the most conceptual problems in the small business sector. In the broadest sense, an entrepreneur may be described as a person who has the ability to explore the environment, identify opportunities for improvement, mobilise resources and implement action in order to maximise those opportunities. The terms thus include a variety of innovators who, on the business side, work in small, medium, as well as large enterprises and on the non-business side, within voluntary or government institutions.

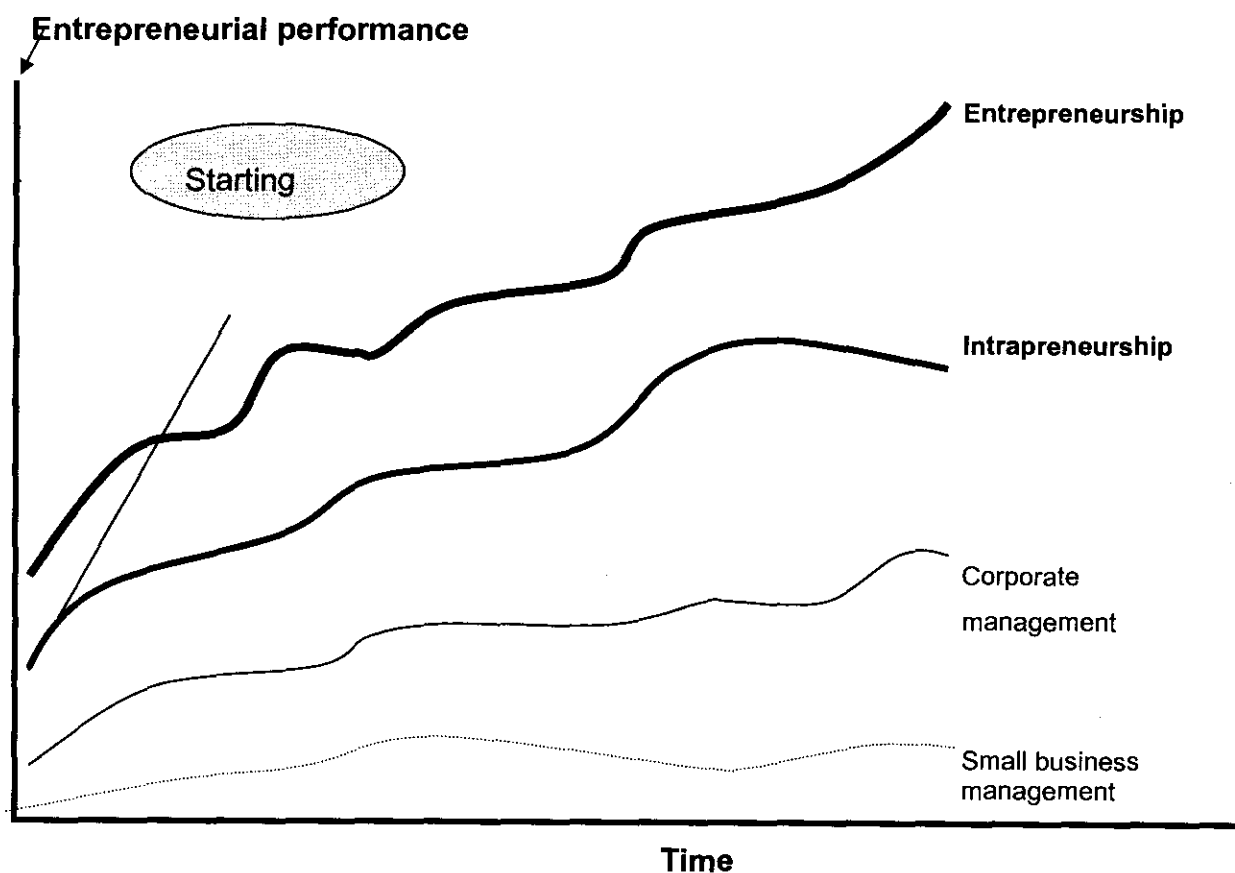
2.3 THE DISTINCTION BETWEEN ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT

Both entrepreneurship and small business management are of critical importance to the performance of the economy. However, it is useful to draw a distinction between them, since small business and entrepreneurial ventures serve different economic functions. They pursue and create new opportunities differently, they fulfil the ambitions of their founders and managers in different ways, and they present different challenges to economic policy makers. Drawing this distinction, is an issue of classification. There are two approaches, of which the first one is between the characteristics of an entrepreneur and a small business manager.

This approach is problematic, because a distinct personality type does not distinguish the entrepreneur and there is no independent test that can be performed to identify an entrepreneur. Consequently the question is a matter of personal opinion. Some people may regard themselves as true entrepreneurs, while others may judge themselves to be "just" small business managers. This can be an emotive issue and it is not clear what benefits are to be gained by placing people into different conceptual "bags" in this way (Wickham, 1998:18).

Entrepreneurship, as seen by Timmons (1994), McClelland (1964) and Carland, Hoy and Bolton (1984), seem to be the starting up of a business (utilising an opportunity) and/or the growth and development of that specific business. Small business management is seen as the starting up of the business, the growth and development up to a certain stage, then the gradual losing of its entrepreneurial flair (Figure 2.2).

Figure 2.2 Entrepreneurial performance versus time



Source: Van Vuuren and Nieman, 1999:5

2.3.1 Innovation

An entrepreneurial venture is usually based on a significant *innovation*. This might be a technological innovation, an innovation in offering a new service, an innovation in the way something is marketed or distributed, or an innovation in the way the organisation is structured and managed or in the way relationships are maintained between organisations.

Small business on the other hand, is usually involved in delivering an established product or service. This does not mean, that a small business is not doing something new. They may be delivering an innovation to people who would not otherwise have had access to it, perhaps at a lower cost or in the form of a higher level of service. However, the small firm's output is likely to be established and produced in an established way. So, while a small business may be new to a locality, it is not doing anything essentially new to the locality; it is not doing anything essentially new in a global sense, whereas an entrepreneurial venture is usually based on a significantly new way of doing something (Wickham, 1998:19).

2.3.2 Potential for growth

The size of a business is a poor guide as to whether it is entrepreneurial or not. The actual definition of what constitutes a small business, is a matter of judgement, depending on the industrial sector, for example a firm with one hundred employees would be a very small shipbuilder, but a very large firm of solicitors. However, an entrepreneurial venture usually has a great deal more potential for growth than does a small business. This results from the fact, that it is usually based on a significant innovation. The market potential for that innovation, will be more than enough to support a small firm. It may even be enough to support a large firm and signal the start of an entire new industry.

The small business on the other hand, operates within an established industry and is unique only in terms of its locality. Therefore, it is limited in its growth potential by competitors in adjacent localities. A small business operates within a given market; the entrepreneurial venture is in a position to create its own market (Wickham, 1998:19).

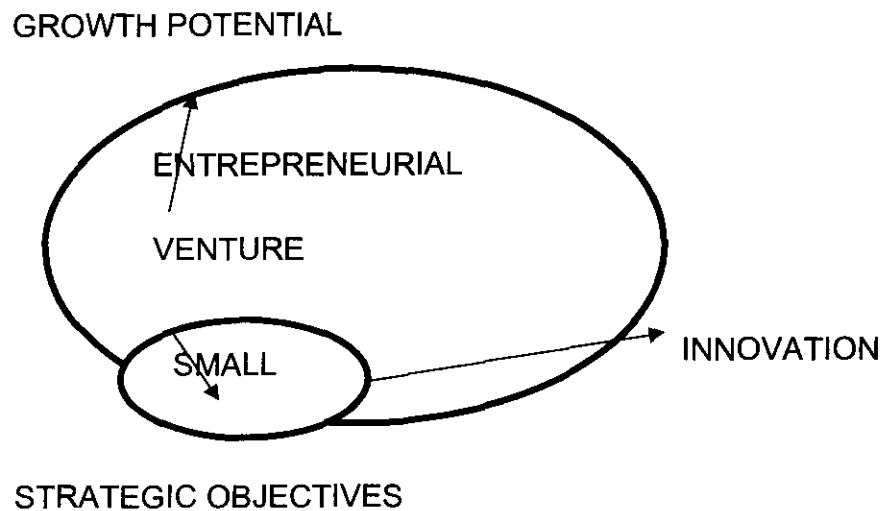
2.3.3 Strategic objectives

Objectives are a common feature of managerial life. They take a variety of forms: for example they may be formal or informal, and they may be directed towards individuals or apply to the venture as a whole. Most businesses have at least some objectives. Even the smallest firm should have sales targets - if not more detailed financial objectives. Objectives may be set for the benefit of external investors, as well as for consumption by internal management. The entrepreneurial venture will usually go beyond the small business in the objectives it sets itself in that it will have strategic objectives. Strategic objectives relate to the following.

- Growth targets:* year-on-year increases in sales, profits and other financial targets;
- Market development:* activities to actually create and stimulate the growth and shaping of the firm's market;
- Market share:* the proportion of the market the business serves; and
- Market position:* maintaining the firm's position in its market, relative to that of competitors (Wickham, 1998:20).

The distinction between an entrepreneurial venture and a small business, is not clear-cut. Generally, it can be said that the entrepreneurial venture is distinguished from the small business by its *innovation, growth potential and strategic objectives*. However, not all entrepreneurial ventures will necessarily show an obvious innovation, clear growth potential or formally, articulated strategic objective and some small businesses may demonstrate these characteristics.

Figure 2.3 Difference between a small business and an entrepreneurial venture



Source: Wickham, 1998:20

2.4 ENTREPRENEURS AS INITIATORS OF SMALL BUSINESS VENTURES

Entrepreneurship is the symbol of a business' tenacity and achievement. Entrepreneurs are the pioneers of today's small business successes. Their sense of opportunity, their drive to innovate and their capacity for accomplishment, have become the standard by which free enterprise is now measured. This standard has taken hold throughout the entire world. Entrepreneurs will continue to be critical contributors to economic growth through their leadership, management, innovation, research and development effectiveness, job creation, competitiveness, productivity and formation of new small business industry (Kuratko and Hodgetts, 1998:6).

Entrepreneurship essentially involves the courage to endure uncertainty, to take risks and to break new ground. We should also recognise, that successful entrepreneurs are required to perform such complementary managerial functions enterprise as responsible direction and control, required in a small business exploiting ideas for expansion, the identification of market opportunities and the improvement of organisation efficiency and cost-effectiveness (Bagshawe, 1995:ix).

Of all the players who feature in the management of the modern world economy, it is the entrepreneurs who mostly attract our attention. It is clear, that entrepreneurs are self-starting individuals that take great personal risk in ordering to bring the benefits of new products and services to wider world markets. There are even concerns about the pace of economic, social change entrepreneurs bring, and of the uncertainty they create. Whether they are admired or questioned, they cannot be ignored. The modern world, and especially small business, is characterised by change. Whether it is shifts in political orders, developments in economic relationships or new technological advancements these changes feed of each other and are becoming global. Developments in information technology allow capital to seek new business investment opportunities even more efficiently. Success is sought out more quickly; failure punished more ruthlessly. Customers expect continuous improvement in the products and services they consume (Wickham, 1998:2).

As a result, small businesses have to become more responsive. In order to keep their place in the market, they have to innovate more quickly. In order to compete, they have to become more agile. This is an issue for any profit-making organisation, but even more so for small business enterprises in order for them to survive. The boundary between the world of the "market" and the public domain, is being pushed back and blurred.

Consequently, the world is demanding both more entrepreneurs and entrepreneurs starting successful small businesses. In mature economies of the western world, small businesses provide economic dynamism. These fast-growing businesses are currently the main source of new job opportunities. The vibrant economies of the Pacific Rim are driven by the successes of thousands of new small ventures.

It is also individual entrepreneurs who must restructure the post-communist countries of Eastern and Central Europe and provide them with vibrant market economies. In the developing worlds, entrepreneurs and small businesses are increasingly responsible for the creation of new wealth and for making its distribution more equitable (Wickham, 1998:2).

The entrepreneurial revolution currently under way, will have a greater impact on the future economic growth of countries than any other event in history. As we learn more about the relatively small number of emerging firms that are contributing to the growth in jobs and economic development, the importance and enormity of the field of entrepreneurship and small business enterprises are becoming more and more apparent (Sexton and Kasarda, 1996:xvii).

Change presents both opportunities and challenges. The opportunities come in the shape of new possibilities and the chance for a better future. The challenges lie in managing the uncertainty these possibilities create. By way of a response to this challenge, small businesses must aim to take advantage of the opportunities while controlling and responding to the uncertainties. This response must be reflected in the way entrepreneurs manage their businesses. In short: we must become more entrepreneurial in small businesses. To do this, we first need to explore and understand the small, medium and micro enterprises (Wickham, 1998:2).

2.5 THE ROLE OF SMME's IN AN ECONOMY

The casual reader of high quality financial magazines and newspapers, might be forgiven for believing that small firms hardly exist in the leading developed economies. Casual scrutiny may fail to identify even a single article either about a business with fewer than 50 employees, or about the small firm sector more generally. Instead, perhaps most pages of newspapers might well be exclusively concerned with very much larger firms and with a particular focus upon those, which are quoted on the stock exchanges. This emphasis on large firms, virtually characterises all financial and economic newspapers.

The above is not surprising if it is realised, that information of large public companies need to be publicly available and widely disseminated for quoted companies, to enable investors to make informed decisions regarding share purchases or sales. It is also the case that large firms produce the bulk of private sector output in most developed countries. The under-emphasising of small firms is surprising, in that politicians in many countries have emphasised, for at least a decade, the importance of small enterprises

as a mechanism for job creation, innovation and long-term development of economies. In its coverage of enterprises, more than 95% of column space in the *Financial Times* is devoted to large firms, whereas in the European economy more than 95% of firms are in fact small and these small firms provide more than half of all jobs in the European Community. This is a striking imbalance in coverage (Storey, 1998:7).

This draws the attention to the fact that small firms, however, constitute the bulk of enterprises in all economies of the world. Such firms also make a major contribution to private sector output and employment. Before small firms are defined as such, it is notable that measuring precisely how many exist in the economy at any point in time, leads to some problems. Many small firms deliberately do not register with state authorities. Others have such a short lifespan, that state authorities do not have time to register their existence before the business ceases trading. Finally, many businesses are so small, that the state does not deem it worthwhile to register their existence and such enterprises are exempted from registration on the grounds of their size. This causes problems for those given the task of estimating the size of the small firm sector, its contribution to output and employment, estimating whether this has changed over a period of time and making comparisons between different countries (Storey, 1998:7).

For all of the above reasons, small firms' statistics tend to be somewhat speculative. Whilst a large part of this literature chapter focuses on addressing the above issues, the uncertainty of small business statistics in virtually all countries has to be in the forefront of the mind of the reader.

2.5.1 Definitions of SMME's

There is no single, uniformly acceptable definition of a small firm. This is because of "small" firm in, say, the petrochemical industry, is likely to have much higher levels of capitalisation, sales and possibly employment, than a "small" firm in the car repair trades. Definitions, therefore, which relate to "objective" measures of size such as number of employees, sales turnover, profitability, net worth, etc., when examined at a sectoral level, mean that in some sectors all firms may be regarded as small, while in other sectors there are possibly no firms which are small (Storey, 1998:9).

The Bolton Committee in the United Kingdom (1971) attempted to overcome this problem by formulating what they call an “economic” definition and a “statistical” definition. The “economic” definition regarded firms as being small if they satisfied the following three criteria.

- They have a relatively small share of the market place.
- They are managed by owners or part-owners in a personalised way, and through the medium of a formalised management structure.
- They are independent, in the sense of not forming part of a large enterprise.

Given this “economic” definition, Bolton then devised a “statistical” definition, which was designed to address the following three main issues.

- Firstly, to quantify the current size of the small firm sector and its contribution to economic aggregates such as the gross domestic product, employment, exports, innovation, etc.
- Secondly, to compare the extent to which the small firm sector has changed its economic contribution over time.
- Thirdly, the statistical definition, in principal, has to enable a comparison to be made between the contributions of small firms in one country with that of other countries (Storey, 1998:9).

Following the Bolton Committee, there have been a number of criticisms of both its “economic” and “statistical” definitions. Taking the “economic” definition first, the Bolton criterion that a small business is “ ... managed by its owners or part-owners in a personalised way, and not through the medium of a formal management structure,” is almost certainly incompatible with its “statistical” definition of small manufacturing firms, which could have up to 200 employees. Whilst Bolton recognised, that some smaller firms may “ ... have one or more intermediate layers e.g. supervisors or foremen to interpret their decisions and transmit them to employees”, it still regarded that small firm

owners are taking all the principal decisions and exercising the principal management functions.

The work of Atkinson and Meager (1994), however, demonstrates that managerial appointments – not simply supervisors or foremen – are made when firms reach a size of between 10 and 20 workers. At that size, owners are no longer the exclusive source of managerial decisions.

The second questionable aspect of the Bolton “economic” definition, is the emphasis upon the inability of the small firm to affect its environment – most notably, its inability to influence, by changing the quantity which it produces, and the price at which a product or service is sold in the market place. In this respect, Bolton is clearly influenced by the economist’s concept of perfect competition. In practice, however, many small firms occupy “niches.” They provide a highly specialised product or service, possibly in a geographically isolated area, and often do not perceive themselves to have clear competitors. As a result, in the short and possibly the medium term, they can maintain higher prices and higher profits than the general industry “norm” (Storey, 1998:10). Bradburd and Ross (1989) show, that whilst large firms are generally more profitable than small ones in heterogeneous industries – where niches are more likely to exist – this relationship is reversed.

Moolman (1987:712) describes what is also known as an “economic” definition for small businesses, in that these are independent, privately owned and privately managed. Characteristics of his definition for SMME’s are the following.

- | | |
|---------------------------------|--|
| • Independence | This means that the enterprise is privately and independently owned and managed and free from outside control. |
| • Common organisation structure | Functions are being managed informally and the management structure is usually not section-divided. |
| • Owners are the entrepreneurs | Owners are not only the shareholders, but also |

the initiators, decision-makers and risk-takers.

- Multiple accountability

Owners are accountable for owner's equity, assets, liabilities, loans and the overall management of the enterprise (Kroon and Moolman, 1992:124).

An alternative "economic" perspective on defining a small firm to that provided by Bolton, is provided by Wynarczyk *et al.*, (1993). Building upon the observation of Penrose (1959), that small and large firms are fundamentally different from each other as a caterpillar is from a butterfly, they attempt to identify those characteristics of the small firm, other than size *per se*, which distinguish it from the larger enterprise. They argue, that there are three central respects in which small firms are different to large firms, namely uncertainty, innovation and evolution. Turning to the criticisms of the Bolton Committee "statistical" definitions of small firms, the following five-point emerge:

- Firstly, there is no single definition, nor even any single criterion of "smallness." Instead, four different criteria are used in the definition – employees, turnover, ownership and assets.
- The second criticism is, that three different upper limits of turnover are identified for the different sectors, and two different upper limits of employees are identified. These make the definitions too complex to enable comparisons to be made either over time or between countries.
- The third criticism of statistical definitions based upon monetary units, is that they make comparisons over time very difficult, since appropriate index numbers have to be constructed to take account of price changes. They also make international comparisons more difficult, because of currency value fluctuations.
- Fourthly, there are problems with employee-based criteria in comparing small and large firms over time. As Dunne and Hughes (1989) point out, output per head in constant prices, varies according to firm size. This shows that, using an index of net

output per head where 1979 equals 100, by 1986 output per head in enterprises with less than 100 workers, was 125.1; whereas that for enterprises with more than 1 000 workers, was 132.8. Hence, taking account of these increases in productivity over the last 20 years, the manufacturing upper limit for a small firm, which was 200 in 1971, would be much closer to 100 in 1993.

- The fifth criticism of the Bolton Committee definitions, is that they treat the small firm sector as being homogeneous. Even though the Committee explicitly recognised, that this was not the case, its single statistical definition for the smaller firm implies the existence of homogeneity (Storey, 1998:13).

To overcome a number of the above-mentioned problems, the lead of European Commission (EC) can be followed. They coined the term "small, medium and micro-enterprises" (SMME's) and disaggregated them into the next three components.

Micro (enterprises)	Those firms with between 0 and 9 employees
Small enterprises	Those firms with 10 to 99 employees
Medium enterprises	Those firms with 100 to 499 employees.

The SMME sector is, therefore, taken to be enterprises, which employ less than 500 workers. In several respects the EC definitions reflect the "break points" in SMME development, which researchers like Atkinson and Meager (1994) and Lyons (1993) have identified. Their findings suggest, that there is a marked shift to formality around the 10 to 20 employee marks and that it is important to subdivide the SMME sector in this way.

The major advantage of the EC definition, is that unlike Bolton, it does not use any criteria other than employment and it does not vary its definition according to the sector of the enterprise. In almost all senses, the following EC definitions are currently more appropriate than those of the Bolton Committee.

- The EC definitions are exclusively based upon employment, rather than on a multiplicity of criteria.

- The use of 100 employees as a small firm limit, is more appropriate; given the rises in productivity which have taken place in the last two decades.
- The third benefit is, that the EC definition recognises that the SMME group is not homogeneous, in the sense that distinctions are made between micro-, small- and medium-sized enterprises (Storey, 1998:14).

According to the White Paper of the South African Government in the national strategy for the development and promotion of small business (1995), the most important distinction is between survivalist activities, micro-enterprises, small enterprises and medium-sized enterprises, with the general term “small business” and the abbreviation “SMME’s” widely used to contrast this with bigger business. The following characteristics of the four categories are outlined in the White Paper.

- *Survivalist enterprises* are activities by people unable to find a paid job or get into an economic sector of their choice. Income generated from these activities, usually falls far short of even a minimum income standard, with little capital invested, virtually no skills training in the particular field and only limited opportunities for growth into a viable business.
- *Micro enterprises* are very small businesses, often involving only the owner, some family members, and at most, one or two paid employees.
- *Small enterprises* constitute the bulk of the established businesses, with employment ranging between 5 and 50. These enterprises will usually be owner-managed or directly controlled by the owner-community.
- *Medium enterprises* constitute a category difficult to demarcate vis-à-vis the “small” and “big” business categories. It is still viewed as basically owner/manager-controlled, though the shareholding or a community control base could be more complex. The employment of 200 and capital assets (excluding property) of about R5 million are often seen as the upper limit (South Africa, 1995).

According to the National Small Business Act of 1996, small businesses are defined as follows. “A separate and distinct business entity, including co-operative enterprises and

non-government organisations, managed by one owner or more, including its branches and subsidiaries, if any, is predominantly carried on in any sector or sub-sector of the economy and which can be classified as a micro-, a very small, a small or a medium enterprise".

2.5.2 State of small business in South Africa

The role played by small businesses is being increasingly recognised the world over. The perceived potential of small businesses to create employment, has caused governments in many countries to pay more attention to the small business sector. Although, almost everywhere, results do not match expectations. Available evidence indicates, that the sector contributes meaningfully to economic growth, social development and employment provision. In the European Union for example, the small business sector accounts for much of the total employment, and a large portion of the total gross domestic product (GDP) (Ntsika, 1999:11).

For South Africa, statistics show, that the SMME sector absorbed nearly 57% of people employed in the private sector, contributing 42% of formal total GDP in 1997. Figures for 1998 remain in the same neighbourhood, while the number of registered enterprises since the 1994 general elections have continued to rise. By any account, the SMME sector in South Africa is important, and the attention it draws from the Government is, therefore, well-deserved (Ntsika 1999:11).

The goals and objectives of the small business promotion strategy are fairly well-known, and differ little between countries. The goals of the South African SMME promotion strategy are, according to the 1995 White Paper on Small Business Development, among others, the following.

- Economic growth and development
- Poverty alleviation
- Income redistribution
- Employment creation

- Economic empowerment of previously disadvantaged population groups
- Democratisation of economic participation.
- Replacement of the present rather oligopolistic structure of the economy with one that allows a much higher degree of competition.

The objectives of the more narrow goals that the promotion strategy expects the South African SMME's to achieve, are among others, to:

- create jobs at low capital cost;
- contribute significantly to the economy in terms of output of goods and services;
- improve forward and backward linkages between economically, socially and geographically diverse sectors;
- create opportunities for developing and adapting appropriate technology;
- provide an excellent breeding ground for entrepreneurial and managerial talent;
- develop a pool of skilled and semi-skilled workers;
- act as ancillaries to large-scale enterprises;
- adapt to market fluctuations;
- fill market niches which are not profitable for large enterprises;
- lend themselves to develop policies favouring decentralisation and rural development; and
- help alleviate the negative consequences of restructuring the economy (Ntsika, 1999:12).

A static picture of the state of small business in South Africa describes its structure at a particular point in time. Thus, it does not show the evolution of variables and indicators that help describe structural changes and key trends in the sector.

Data on small businesses are, in general, poor in South Africa, and data that can be used to study small business trends, are even poorer. However, certain indicators can be used to measure any progress in this sector. The number of new registrations of businesses can provide a proxy for measuring entrepreneurial activity, but it must be interpreted with caution. Not even registration properly identifies a new enterprise. Registrations are often affected by take-overs, relocation, or changes in activity or legal status.

Nevertheless, a sharp increase occurred in enterprise registration between 1990 and 1998. The number of private companies registered increased from 6 369 in 1990 to 236 551 in 1998. This represents an almost 3.5-fold increase in nearly a decade. In addition, the number of Close Corporations (CC's) increased from 28 008 in 1990 to 73 114 in 1998, representing an approximate 2.5-fold increase during this period (Ntsika, 1999:61).

Even though the SMME sector in South Africa is confronted with difficulties and particular challenges that have to do largely with the recent past of the country, it is playing a very significant role in the economy, in terms of job creation and income generation. The government is addressing the problems by creating an enabling environment, designing and implementing programmes, and providing and strengthening institutional support for small business sector development. Already there are signs that these efforts are beginning to bear fruit; and given certain developments that favour this SMME sector, it is expected that its role in the economy will increase and even become crucial in the future.

2.5.3 The difference between SMME's and Large Firms

The factors involved in the difference between SMME's and large firms are uncertainty, innovation and evolution.

2.5.3.1 Uncertainty

The three dimensions of uncertainty are the following.

- Firstly, the uncertainty associated with being a price-taker, which can be considered to be the inverse of the Bolton definition, which emphasized the small share of the market place.
- Secondly, the source of uncertainty for small firms, is their limited customer and product base – the classic example of which is where small firms simply act as subcontractors to larger firms. Lyons and Bailey (1993) describe what they refer to as “subcontractor vulnerability”.

They argue that this depends not only upon dependence on dominant customers, but also upon the extent to which output is specialised to particular customers, the specificity of investment decisions made and the probability that the customer will withdraw the custom. They clearly show, that even for subcontractors as a body, the smaller firm clearly perceives it to be more vulnerable than does the large firm and then acts accordingly.

- The third dimension of uncertainty relates to the much greater diversity of objectives of the owners of small firms, as compared with large firms. Many small business owners seek only to obtain a minimum level of income, rather than maximising sales or profits. Small business owners do not have to concern themselves with reporting *their actions to external shareholders*, and so “*performance monitoring*” effectively does not exist. For a small firm, the relationship between the business and the owner is very much closer than it is between the shareholder and the large firm. The motivation of the owner of the small firm, is therefore, a key influence upon small-firm performance. This contrasts with large-firm management literature, which emphasises the importance of control. Here the central issue is how the owners of the business do ensure that the managers of the business act in their interest and how senior managers exert control over more junior managers. This form of “internal” conflict is absent in a small firm, where ownership and control are located in the hands of a few people, or possibly of a single individual (Storey, 1998:11).

The central distinction between large and small firms then, is the greater external uncertainty of the environment in which the small firm operates, together with the greater internal consistency of its motivations and actions.

2.5.3.2 Innovation

The second key area of difference between small and large firms, is their role in innovation. The glamorous role small firms play (Schumpeter, 1934) – was that of initiating “gales of creative destruction,” through the introduction of totally new products, with some basis in fact; yet the much more conventional role, which small firms play in innovation, relates to the “niche” role, as discussed earlier. It is the ability of the smaller firm to provide something marginally different, in terms of product or service, which distinguishes it from the more standardised product or service provided by larger firms (Storey, 1998:12).

The small firm, however, is also much less likely to undertake research and development than a large firm, and is less likely to have a high proportion of its staff concerned exclusively with research. Even so, small firms are more likely to introduce fundamentally new innovations than are larger firms, this feature often being attributable to small firms having less commitment to existing practices and products (Pavitt *et al.*, 1987).

2.5.3.3 Evolution

The third area of difference between large and small firms, is the much greater likelihood of evolution and change in the smaller firm. Reference has already been made to the transition, which Penrose (1959) observed the small firm to make in its becoming larger. Management theorists have seen it to be not a single-stage change, but rather a multiple-stage change. Thus, small firms, which become larger, undergo a number of stage changes, which influence the role and style of management and the structure of the organisation (Scott and Bruce, 1987). The key point is, that the structure and organisation of the small firm, is more likely to be in a state of change as the firm moves from one stage to another, than is the case for large firms.

2.6 CONCLUSION

As can be seen in the foregoing the above literature review, Wynarczyk *et al.*, (1993) argue, that the essential dimensions in which small firms differ from large firms, relate to

uncertainty, innovation and firm evolution. They argue, that it is these dimensions, which should be explored as a “bottom-up” way of theorising about small firms, rather than implicitly assuming that a small firm is a “scaled down” version of a large firm.

The definition of SMME's is a contentious issue for management researchers and still there is no one single viable definition for this field of study. It has been suggested, that the limited scale of its operations characterise the small organisation. Restricted activity in terms of market share and limited turnover, are indicative of a small scale of operation but the most frequently used indicator of size, is the number of employees. Small organisations will normally employ fewer people than do large ones, although opinions differ about the number of people employed in them. Definitions of small firms further also differ between countries, but the important role and contribution of SMME's towards economies all around the world, remains an all-important issue in this field of study.

In the following chapter (Chapter 3), the SMME environment will be explored in further detail.

CHAPTER 3

THE ENVIRONMENT

3.1 INTRODUCTION

Small firms are of vital importance to economies, though they are not mini-versions of large corporations; they have features in common with all organisations, but also have unique characteristics and attributes which are reflected in the manner in which they are organised and managed. The small scale of their operations, could mean that small ventures have little impact on their surroundings and have little power to modify environmental forces to their advantage.

Classic economics would suggest, that they accept their industry's price and that their output has no impact on the overall market for their goods or services. In addition, they will seldom be able to exert a strong influence on suppliers, the legal fraternity, politicians or the local community (Carson *et al.*, 1995:62). However, their weaknesses in these areas can be counterbalanced by the ability of smaller ventures to react quickly to environmental changes. Large, bureaucratic ventures require stability; indeed, it has been suggested, that stability encourages bureaucracy, which in turn have a vested interest in reinforcing environmental stability (Robbins, 1992).

However hard they try, large organisations have a limited capacity to control environments and very stable environments are rather uncommon nowadays. Fundamental changes in social values, consumer tastes, technological developments, managerial techniques and financial markets offer the smaller, flexible, responsive organisation an advantage over giant organisations. Their non-bureaucratic structural arrangements, together with the concentration of decision-making power in the hands of the owner, allows growth-orientated small ventures to capitalise on the opportunities, which emerge from environmental changes (Carson *et al.*, 1995:62).

Small organisations usually thrive in a changing environment, but literature have pointed out, that the environment must not be unduly complex (Mintzberg, 1979). Mintzberg

mentions, that the tasks completed by the organisation, are relatively easy to comprehend. If the organisation is required to solve a complex problem for its customers – the design and manufacture of electronic surveillance equipment, for example – the owner is unlikely to understand the fine detail and rapid developments of the technology. To operate successfully in this kind of business, it is necessary to employ experts and delegate a significant amount of decision-making authority to them. Since most owners of small firms are reluctant to delegate important decisions to their employees, it is unlikely that small owners and owner-managers will feel comfortable in this environment. The larger small firm (medium enterprise), with a fully fledged group of non-owners in managerial roles, must cope in a more complex environment, but it has been pointed out, that even in these organisations owners simultaneously grant their managers decision-making freedom and so retain the authority of ownership (Goffee & Scase, 1985).

Carson *et al.*, (1995:63) aver, that in formulating personal and organisational strategy, owners use their contacts to develop an image of the environment and pursue opportunities which offer the potential and which accord with the values.

They are personally involved in seeking opportunities and the changes that occur in the turbulent small firm's environment, present openings, which many owner/managers will grasp. Given the limits imposed by a small scale of operations, evidence suggests, that growth-orientated owners of SMME's pursue opportunities flexibly and innovatively. Unlike their counterparts in large organisations, entrepreneurial owners pursue a number of opportunities, but they are ready to take risks. Not having sufficient resources to underwrite their opportunities, they have to develop creative and innovative ways of acquiring the requisite resources (Stevenson & Gumpert, 1991).

Turning to market matters, Carson *et al.*, (1995) state, that small firms are not in a position to manipulate their markets and they do not have the volume to compete with large ventures on the basis of price. As a result, it has been suggested, that their best option is to seek a niche market and to avoid market penetration or diversification as a development strategy. Through appropriate market or product development strategies, suitable niche markets and products can allow a small firm to grow. The inability of the

small firm to dominate a market, suggests that they will need to spend considerable time in the pursuit of order, as recent research evidence reveals that owners are closely involved in seeking new order and developing new markets (Lindsay *et al.*, 1993).

Overall, it can be seen, that in assessing entrepreneurial and market opportunities SMME's, through the centralisation of strategic decision-making power and their flexible structures, respond rapidly to openings and use their creative skills to acquire the resources they need.

3.2 THE ACQUISITION OF RESOURCES FOR SMME's

In respect of marshalling resources, small firms face special difficulties. Suppliers are keen to reduce their administrative and transport costs by processing large orders and they are sometimes reluctant to supply small quantities of their materials.

In addition, price discounts available to large buyers, are rarely offered to small ventures. In large organisations expert procurement officers who fully understand the buying process and command significant buying power, can ensure that appropriate priced materials arrive at their warehouses just in time, but generalists in the small firms will handle this managerial function. Lack of specialised expertise can place the small firm at a disadvantage (Carson *et al.*, 1995:64).

The acquisition of adequate finance is no less troublesome. Financiers require access to detailed financial information, if they are to offer large sums of relatively cheap money to business. However, most small firms are not quoted on stock markets and they are understandably reluctant to divulge sensitive financial data to outsiders. They are, therefore at a serious disadvantage, and this, coupled with their problems in managing cash flow and getting paid, can lead to under-capitalisation problems (Carson *et al.*, 1995:64).

Matters are no easier when it comes to hiring labour. Research reveals that small firms, which cannot compete i.r.o. the salaries offered by giant corporations, have difficulties in recruiting enough skilled workers (Storey, 1985). Most owner-managers are deeply committed to their ventures, but work is merely an instrumental activity for many

employees. When owner-manager expectations are not realised, labour-management conflict can come to the fore in small firms.

Considerable problems also arise i.r.o. in hiring and developing managerial personnel. It has been shown that individuals start many small firms with some experience of production or general management. Few firms have the financial expertise at their disposal and only growth-orientated ventures have access to marketing talent. As firms grow, they invariably need additional managerial expertise in finance, and hiring accountants from the labour market usually fills this gap. Marketing and personnel activities are more likely to be carried out by the owners themselves or by promoted employees. However, difficulties arise because of the scarcity of well-qualified people who will work in small firms and by the reluctance of owners to develop their managers. The fear develops, that skilled managers will leave, and set up competition (Cromie, 1991).

The above review reveals, that small firms do experience problems in acquiring resources and that their lack of specialist expertise, coupled with the small scale of their operations, affords them little purchasing power.

An additional problem arises from the intermittent nature of their demand for resources. It has been mentioned, that small firms thrive in changeable conditions but, unless they are prepared to hold large stocks, the variation in the demand for final products will be reflected in an irregular demand for resources. In general, the difficulties in procuring resources emanate from the following two sources.

- Changeable demand
- Lack of leverage.

3.3 THE STRUCTURE OF SMME's

Organisations often break down tasks into their component parts and assign specialist staff to complete their part of the overall task. However, specialisation is economically feasible only if a venture has a large output. There is no merit in dividing work into specialised components and hiring experts to complete it, unless the experts are to be

fully employed. If the volume of work does not warrant the recruitment of a specialist, then this work will have to be done by someone else – by a consultant, a non-specialist or the owner in person. Since it is highly unlikely that the non-specialists will be as proficient as the specialists, some of the cost-advantages of specialisation will be lost to the small firm. Small firms do not normally exhibit the complicated, sophisticated structure, the managerial hierarchies or the formalised behaviours, which are found in large organisations. While small enterprises usually employ staff that perform a range of tasks, large organisations tend to use specialists who perform the same activity time and time again. This means, that procedures, rules and general instructions can be formulated for the latter's work, which can then be written down in manuals, etc. It can be seen, therefore, that many of the structural features of small ventures arise, because they are small (Robbins, 1992).

3.4 MANAGERIAL INFLUENCE AND CONTROL OF SMME's

The SMME's owners experience tension between exercising the right to dictate organisational policy and goals and at the same time react and respond to the knowledge and wishes of the personnel in the firm. These tensions are shown in the top half of Table 3.1. *Ad hoc*, flexible approaches are required in small firms and a closely-knit operative team approach is needed.

It is also clear, that the owner occupies a dominant position and it would seem that a potential for tension exists between the desire of the owner to exert a strong influence on events and the need to empower personnel. The result is often a strong, directive, leadership role (see lower section of Table 3.1). They coordinate the activities within their organisation by the direct, face-to-face supervision of others; they use one-way communication and the decision-making process centralises in the person of the owner-manager (Carson *et al.*, 1995).

Table 3.1 Managing the small firm: controlling and empowerment forces

PRESSURES FOR CONTROL		PRESSURES TO UNSHACKLE
Owners use entrepreneurial flair to determine their and the organisation's goals	The owner must monitor activities, become aware of the tensions and resolve the conflicts which arise between these opposing forces	Owner is close to employees and consults with them
Owner is independent		Owner needs co-operation of staff
No divorce of ownership from control		Employees carry out management functions
Family control is strong		Career prospects for managers must not be ignored
Little management through organisation, therefore personalised management style		Organic structures, employee discretion call for a team approach
All-powerful owner adopts a directive leadership style		Small size encourages participative approaches
Co-ordination by direct supervision		Co-ordination by mutual adjustment
Centralised decision-making		Autonomy and discretion afforded to employees
Top-down communication from the owner		Two-way communication for problem-solving
Owner uses transactional approach to relationships		Owner and others seek collaborative relationships

Source: Carson *et al.*, 1995:72

Although SMME owners want to retain a substantial element of decision-making power, they are also seeking to promote flexibility, innovation and problem-solving among their

employees. This paradox is addressed directly in a study of family firms in the general building and personal service sectors by Goffee and Scase (1985). They found, that the structural arrangements in their sample were flexible and organic and that the owners did delegate a degree of decision-making autonomy to their non-owning managers. Drawing on the work of others, Goffee and Scase show that informal, organic structures and centralised decision-making can coexist. In the case of the owners, Goffee and Scase indicate, that managers manage flexible, organic, informal departments and delegate decision-making autonomy in some instances, while the owner retains control over other decisions.

The retention of authority by owners in key areas and the occasional intrusion into the manager's territory, will cause a little tension, but if owners intercede on a regular basis, the tension may become unbearable. For this reason the owners in this study influence their managers by indirect methods in order to ensure that they make the "right" decision (Goffee and Scase, 1985).

Goffee and Scase further show, that the owners took advantage of the flexibility, ambiguity and lack of rules in organisations to bring their influence to bear upon many decisions. Owners and managers revealed, that they were in constant discussion with one another and consequently, a degree of "telepathy" developed between them.

Even though the managerial skills and performances of SMME's do not form an integral part of this study, they are of relevance, in that the speculating on those skills which managers of SMME's might be well advised to develop shed more light on the research. In managing a small enterprise words like creativity, adaption, change, ambiguity, flexibility, problem-solving, collaboration and organic structures occur at regular intervals. This is because small firms exist in a changeable environment, where firm orders are hard to come by, and this makes prediction, planning and formalisation difficult. In consequence, in the formulation of strategy, the acquisition of resources and the organisation of production temporary, *ad hoc* project and production teams are put together in order to meet the demands of an ever-changing environment (Carson *et al.*, 1995:74).

3.5 IMPORTANCE OF SMME's

Small enterprises, no matter how they are defined, constitute at least 95% of enterprises in the European Community. The average employment size for firms in the European Community, vary from three employees in Greece to 10 in the Netherlands. Despite their huge importance, and the relevance that politicians now give to the small firm sector in terms of economic development, the message seems to have been virtually ignored by financial and economic commentators. Sengenberger *et al.*, (1990) conducted a comprehensive review on international comparisons between small firms in France, Germany Italy, Japan, the United Kingdom and the United States. They conclude as follows.

"The most important empirical results to emerge from the country reports is that there has been a recent increase in the share of total employment in small enterprises and establishments which are defined as those with fewer than 100 employees. In general, the increase has been at the expense of large enterprises and establishments. While the magnitude of the increase varies considerably from country to country and across sectors, its significance rests primarily on the fact that it signifies the reversal of a substantial downward trend in the employment shares of small units that had prevailed for many decades."

The SMME sector has an irrefutable economical and social function in the free enterprise market. The stimulation and enhancement of small business activities and their competitive abilities, offer continuous challenge to the entrepreneur, as well as the economical policy and strategy of a country (Kroon and Moolman, 1992:129).

Kroon and Moolman (1992:129) mention the following as reasons for the importance of SMME's in a country.

- *SMME's are multitudinous* – SMME's represent an average of 92,8% of the total amount of enterprises of 17 countries in a research study by Moolman (1984:138).

- *Supplier of employment and creation of work opportunities* – the SMME market is much more labour intensive than the production and large-scale technology factories.
- *Economic stability and better distribution of economic activities* – with an effective economic strategy, a country can restrict conjuncture fluctuations to a minimum.
- *Innovator and initiator* – the *small* businessman disposes over more freedom and initiative to play the role of inventor of new products, ideas and techniques.
- *Subcontractors for the large enterprises* – large and small enterprises work in partnership. Manufacturers of mass products are largely dependent on smaller firms for the distribution of their products.
- *Manifestation of the free market system* – the SMME sector has a substantial influence on the free market economy regarding healthy price rivalry.
- *The small sector plays a socio-economic role* – firstly, small enterprises offer a wide range and a high standard of personal service and secondly, the small enterprise is not only prepared, but also capable to plough back into the community.
- *SMME's are flexible and adaptable*: there are three reasons for this.
 - Shorter communication channels
 - Quicker decision-making
 - Fewer rules and regulations.
- *SMME's can have a multiplying effect* – especially on socio-economic activities; this effect starts when personnel are being recruited from elsewhere. They receive remuneration, which is spent on other necessities such as housing and other essential provisions. This leads to the development of a total infrastructure.
- *Entry into the business world* – the SMME is many times the starting point for the entrepreneur into the bigger business world (Kroon and Moolman, 1992:129-136).

While the SMME sector has remained an enigma for years, a series of empirical studies have recently enabled researchers to assemble a far better collective understanding of

the economic role of small firms and entrepreneurship. In the following section, Sexton and Kasarda (1996) present stylised facts on the economic role of small firms in market economies.

Stylised fact 1 A shift in the size distribution of firms has occurred away from larger firms towards smaller ones

The shift in the firm size distribution is found in most industrialised countries at both the enterprise and establishment level. They point out, that the actual size distribution of firms at any particular point in time, depends on the institutional or historic context: Major criteria for structuring SMME sectors are the legal status, the ownership status, the distinction between “craft” and “industrial” firms, independent and subordinate firms, or small firms in small-firm industries vs. small firms in industries, where large enterprises dominate or where there is a mixed size composition (Loveman and Sengenberger, 1991:5). In other words, while there appears to be no predetermined optimal size distribution of firms, the shift towards a large percentage of small firms in most countries is even more remarkable, given that these firms started from such different points.

Stylised fact 2 The firm growth rate decreases with firm size and firm age

Recent studies have considerably expanded the state of knowledge about the relationship between firm size and growth. Hall (1987) identified a four-percentage point difference in the annual growth rates between firms in the 25th and 75th percentiles within publicly traded firms. Smaller firms were found to grow faster than their larger counterparts. Hall argued, that differences in investment and R&D outlays, explained the truly superior job creation performance of smaller firms. Building on the work of Jovanovic (1982), Evans (1987) also casts considerable doubt on Gibrat's Law of the relationship between firm size and firm growth. In this 1987 paper, Evans selected 100 four-digit Standard Industrial Classification industries and calculated individual firm growth rates between 1976 and 1980. He found, that Gibrat's Law did not hold in 89% of the industries. The firm growth rate is found to decrease with both firm size and firm age.

Stylised fact 3 Small firms are at least as innovative as large firms on a per employee basis and generally have the innovative advantage in high-technology industries

The most convincing evidence in support of the innovative advantage of small firms comes from the U.S. Small Business Innovation Data Base (Scherer, 1991). The latter, found that in 1982, large firms in manufacturing introduced 2608 innovations. Small firms contributed 1923 innovations. However, small firm employment was only about one-half as great as large-firm employment, so that the mean small-firm innovation rate was 322 innovations per million employees. By contrast the large-firm innovation rate was 225 innovations per million employees. The small-firm innovation rate is relatively higher in the high-technology industries such as instruments, chemicals, non-electrical machinery and computers.

Stylised fact 4 Small firms face binding liquidity constraints

It is suspected, that small firms face liquidity constraints because of imperfect capital markets. Evans and Jovanovic (1989) concluded, that imperfect credit markets do indeed constrain entrepreneurs. They based their judgement on econometric tests in which wealthier people are shown to be more likely, *ceteris paribus*, to switch from paid employment into self-employment. Fazzari *et al.*, (1988) found, that for a sample of publicly trade companies, financing was more difficult than for larger firms. Finally Blanchflower and Oswald (1990), using British data, found, that the probability of self-employment depends upon whether the individual ever received a gift or an inheritance. Those that were given or inherited 5 000 pounds, for example, were approximately twice as likely, *ceteris paribus*, to establish a business. These results are consistent with other countries' results, stressing the importance of capital and liquidity constraints.

Stylised fact 5 The small-firm share of employment is growing faster in the goods-producing sectors than for the economy as a whole

Between 1977 and 1986 the small firm share of employment increased in the goods-producing sectors and decreased in the non-goods producing sectors. Small-firm employment increased by 7,8% in mining, 3,5% in construction and 1,8% in manufacturing. During the same time period, small-firm employment decreased by 0,8% in wholesale trade, 7,5% in retail trade, and 3,2% in services (Brown *et al.*,

organisation structures, and financial resources generally differ from those of bigger companies.

The differences give them several unique advantages (Boone and Kurtz, 1996:125-127).

- *Innovation.* Small firms are often the first to offer new products to the market (when introduced by an entrepreneurial venture). Federal Express and Apple Computer, are classic success stories.
- *Better customer service.* A small firm can often operate more flexibly than a large corporation, allowing it to tailor its product line and services to the needs of its customers. As television broadcasts reach all over the globe for example, more people are demanding specific products.
- *Lower costs.* Small firms can *often* provide products more cheaply than large firms. Small firms usually have fewer overhead costs – costs not directly related to providing specific goods and services – and can earn profits on lower prices than large companies can offer. A typical small business has a lean organization, with a small staff and few support personnel. The lower overhead costs, due to a smaller permanent staff, can provide a distinct advantage to a small business. Such a firm tends to hire outside consultants or specialists, such as attorneys and accountants, only as needed. By contrast, larger organisations often keep such specialists as permanent staff members. As a rule, all growing organisations add staff personnel faster than line (or operating) personnel.

To keep costs as low as possible, many entrepreneurs start their small businesses from their homes. This location decision can be either a good idea or a disaster, depending on the nature of the business and the nature of the entrepreneur. Some lines of work are better adapted to a home setting than others. This specific location decision will be discussed further in the following literature chapter.

- *Filling isolated niches.* The size of a big business excludes it from some markets. High overhead costs force it to set minimum sizes for targets at which to direct

competitive efforts. Some large publishers, for example, identify minimum acceptable sales figures that reflect their overhead costs. This situation provides substantial opportunities for smaller publishers with lower overhead costs. In addition, certain types of businesses lend themselves better to smaller firms. Many service businesses illustrate this point. Finally, economic and organisational factors may dictate that an industry consists essentially of small firms.

3.6.2 Disadvantages

SMME's also have several disadvantages, including potential for poor management, risk of inadequate financing, and government regulation. A small firm can be more vulnerable than a large, diversified corporation during a recession, since it probably has fewer resources with which to cushion a fall. Table 3.2 shows the survival rate of new small businesses in a variety of industries; an average nearly 62% of all businesses dissolve within the first six years of operation (Boone and Kurtz, 1996:128).

Table 3.2 Survival rate of businesses

SURVIVAL RATE OF BUSINESSES (SHOWN AS PERCENTAGE %)	YEARS <2	OF 2-4	SURVIVAL 406
Total: All industries	76,1	47,9	37,8
Construction	77,1	56,6	35,2
Manufacturing	78,7	56,2	46,2
Transportation, communication & public utilities	75,7	46,2	37,0
Retail trade	75,6	48,1	37,0
Finance, insurance and real estate	74,2	46,2	36,0
Services	75,4	46,5	37,3

Source: Boone and Kurtz, 1996:128

The most important disadvantages for SMME's are (Boone and Kurtz, 1996:128-130).

- *Poor management.* Poor management is a common reason why small businesses fail. Frequently people go into business with little, if any, business training. Someone may launch an enterprise based on a great idea for a product or service,

assuming that knowledge about business matters will come as the firm operates. Bankruptcy is often the result. It is also important to recognise the enterprise's limitations; few business owners possess the specialised knowledge of an attorney or an accountant – outside professionals should be called in when needed.

Moreover, small business owners sometimes allow their entrepreneurial optimism to run wild. They forget about details like paperwork and also neglect to “do their homework” before starting the small business. The belief that others will see a product as unique or better than that of the competition, should be verified by market research.

- *Inadequate financing.* Inadequate financing is another leading cause of small business problems. Many businesses start with inadequate capital and soon run short of funds. They often lack the resources to survive rough periods or to expand if they are successful. Table 3.3 illustrates the financial obstacles that most often confront small businesses. The biggest problem is uneven cash flow and finding funds to pay taxes and employees rank second.

Table 3.3 Greatest financial obstacles of small businesses

FINANCIAL OBSTACLES	PERCENTAGE
Uneven cash flow	33%
Taxes	16%
Payroll	16%
Securing outside capital	12%
High office rents	5%
Other	14%

Source: Boone and Kurtz, 1996:129

Most financing for a typical small business comes from the entrepreneur's own resources. Banks provide relatively little funding for small companies. Home-based entrepreneurs may find it especially difficult to qualify for bank loans.

Entrepreneurs also turn to venture capitalists for funding. These are business organisations or groups of private individuals that invest in promising new firms.

Venture capitalists may lend money to businesses or become part-owners of new struggling companies.

- *Government regulation.* SMME's all over the world aggressively complain of excessive regulation and red tape. It is estimated, that government paperwork costs small firms billions of rands each year. A larger firm with a substantial staff can usually cope better with the required forms and reports. Many experts within and outside government recognise a need to reduce the paperwork required of small businesses, since they are simply not equipped to handle the burden. Some small firms close down for this reason alone. Especially residential-based businesses have a large burden regarding the rezoning process of properties for business purposes. This aspect will receive more attention in the following literature chapter as well as the empirical study.

3.7 LOCATION-DECISION AS AN ESSENTIAL PART OF SMME'S SURVIVAL

According to the above literature review, it is quite clear that several important decisions are to be made by the small business enterprise. Most of these decisions can and mostly will indicate the future performance of the enterprise as well as the possibility of survival in the long term. One such decision must be made right at the initial stages of starting a small business if not right at the beginning, namely location. Even though some enterprises make this important business decision only once in their lifetime, most businesses come across this issue more than once during the lifespan of the enterprise. Whatever the case might be, the business location-decision could be the single most important decision in the life of the entrepreneur.

Most previous studies dealing with business site selection decisions, have been theoretical and concerned mainly with cost factors. There are many variables other than cost, some of which are qualitative and intangible in nature. In the chapter on literature the researcher will attempt to provide evidence on the importance of cost and other location-related variables. Various types of SMME locations will be investigated,

with a detailed discussion on each of them, which will lay the foundation for the further empirical study on this specific topic.

3.8 CONCLUSION

SMME's are a potent force in many economies, yet it is important to recognise that they are quite different from their larger counterparts. The small scale of their operations reduces their power in relation to their environment, but their centralised decision-making, flexibility and closeness to the customer, afford a competitive advantage. Many of their markets are niche markets and the congruence between the personal goals of the owner and the organisation's goals, will ensure that all employees are aware of the mission of the firm. As a result, the inversion of means and ends, which is common in large ventures, is unlikely to be prevalent in small ventures. Lack of leverage may present problems for SMME managers in acquiring resources and it is incumbent on them to fine-tune their political and relationship skills to allow them to marshal their inputs.

Organisational structures in SMME's are much less rigid, sophisticated and complex than in bureaucracies and their fluid arrangements will not inhibit the creativity and flexibility, which is necessary for continued entrepreneurial success. Working arrangements tend to be ad hoc and individual, while other resources are general-purpose, not specialised. These working arrangements tend to be more interesting and rewarding than those in bureaucracies, but coordination can cause problems. The small number of managers will be kept busy maintaining an overview of activities, a good deal of trust is needed since self, and peer control is quite common.

Owner-managers in SMME's have to achieve a skilful balance between offering staff the freedom necessary to sustain entrepreneurial opportunity-seeking and innovation, while ensuring that current activities are fully directed towards attaining present-day goals. Delegation of authority is practised, but indirect influence and effective socialisation of others, ensure that "appropriate" decisions are made.

In this chapter the discussion commenced with entrepreneurship as the initiator of the small firm and this phenomenon was briefly discussed. The discussion led into a much

more detailed evaluation of small, medium and micro enterprises (SMME's). The economic, as well as statistical definition of SMME's, was discussed, and this led to exploring the environment and structure of small firms. Management issues, the importance of SMME's, as well as the advantages and disadvantages of these kinds of businesses, were finally discussed in more detail.

One of the most important SMME decisions for the owner-manager, will be the choice of location. Whether it is for the first time, or relocating of the enterprise, it is always a long-term decision and cannot be taken lightly. This crucial decision, as well as all the different types of locations, is discussed in detail in Chapters 4 and 5.

CHAPTER 4

LOCATION THEORY

4.1 INTRODUCTION

To understand the difficulties of the very important location-decision for SMME's, it is necessary to discuss the background and literature around location as a theory. Location theory is a set of propositions yielding a systematic exposition and explanation of the spatial organisation of economic activities. Traces of location theory may be found in the writings of many classical economists including, Smith, Ricardo and Mill. A interest in plant location theory may be attributed to three Germans: Launhardt, von Thunen and Weber. They set the stage for what today is called the "least-cost theory of plant location".

Their analytical framework was essentially that of pure competition, as all buyers were assumed to be located at a given market centre, with prices of goods fixed and the demand for each product unlimited, relative to any seller's supply. The location of choice involved production factor substitutions, as sellers searched for the site offering a lowest delivery cost to the market (Greenhut, 1995:43).

During the last two decades small, medium and micro enterprises (SMME's) all over the world have changed their locations for a variety of reasons. The extensive degree of investment in new locations indicate the significance of location decisions (Karakaya and Canel, 1998:321).

One of the most momentous decisions any manager will ever make - whether running a multibillion rand conglomerate or a neighbourhood-clothing store – is the decision to move the business or any part of it. Whether it means shifting a plant, office, warehouse or showroom, anyone who faces such a decision, must live with the consequences for a long time after. Moving a business, is obviously more than just packing up the files and the computers, calling a truck and setting one's business

somewhere else. The multitude of factors that go into a decision to move, demands that the executive consider at least some of the following questions.

- Does the business really need to move – or can the needs be met by expansion?
- What are the actual needs and what can the business afford?
- Where shall the business look for a new site?
- What are the costs going to be at the prospective new location? (Tax, utilities, etc.).
- What is the attitude of local government towards small business development?
- How is the business going to manage the transfer of their employees?
- Is the kind of labour they need, available at the new location?
- What is the “quality of life?” Will the employees want to live and work in the new location?
- How is the business going to finance the move of the purchase? (Browning, 1980: vii-viii).

For the above questions, there are no hard-and-fast rules and no easy universally applicable answers.

Czamanski (1981) refers to a growing dissatisfaction with the classical location theory. He asserts that operations researchers reduce complex location decisions to an algorithm form and solve these problems with existing decisions should involve more than the “cost factors”. Schemenner (1979) supports this view and states, that costs can be estimated through any quantitative analysis and should definitely consider the intangible and qualitative factors. He cites, that the intangible could be risks associated with the costs or demand estimates, business climate of locations, local and state government attitudes, commuting distances for workers, managers, and the impact of other businesses in the area.

4.2 THE THEORY OF LOCATION

Johann Heinrich von Thunen (1875) studied the agricultural location and reasoned that the heaviest and least valuable agricultural product should be raised close to a city. Further, if two farmers produce the same product and sell it at the same price, the one closest to the city can spend more for machinery, labour, fertiliser, etc.

Alfred Weber (1909) expanded PM Von Tunen's use of transportation costs as a basis for business location. He classified resources into those available everywhere (air and sea) and *localised materials*, those limited to certain location (minerals, ores, etc.). As viewed by Weber, industry divides itself into two groups: those orientated to labour and those orientated to transportation. When two alternative locations come out about equal on these two counts, then consideration of *agglomeration factors* becomes important. Agglomeration factors refer to closeness to suppliers, economics of size, improved marketing outlets, etc. (Browning, 1980:54).

Edgar M. Hoover (1937) separated the cost factors of location into (1) transportation factors, and (2) production factors. Transportation was defined as the cost of procuring raw materials and distributing the finished product. Production included not only labour and other manufacturing costs, but also the agglomerative and institutional forces. He stressed, that the terminating costs are independent of the length of haul and that the cost per mile of the haul decreased with distance. Thus, sea transport, with high terminal costs, usually involves long-distance shipments. Hoover included in agglomeration such advantages as better transfer services, a broader, or flexible labour market, more advanced banking facilities, better police and fire protection, and lower insurance costs and utility rates.

A problem with the theoretical approaches is, that they presuppose a unique location that has site equality advantageous for serving all areas of the market. In reality, a location may be the most profitable, despite the fact that it has a high cost relative to other locations or to the market area. Market area in location theory does not refer to the number of square miles, but to the rand volume of sales. Thus, a freight or production cost disadvantage narrows the market area; conversely, an advantage

widens the market area. Greenhut (1996) states the following i.r.o. those attempting to derive a least-cost effective-cost location.

- "Any business ... most chooses first among buying centres. The determination of the best consumption points (area) involves the concept of demand; or otherwise expressed, it is the location of competitors which predetermines price and sales at any buying point for any business ... Location in the backyard of rivals is, therefore, self-explained; more customers or the same number of customers ... can be served at "P" and cost "X" than is possible for any other location ... selection of a site calls forth not only substitution among costs at alternative locations, but a balancing of all factors accounting for profit, demand and cost".
- The purpose of these and other location exercises lies in getting the searcher to be divorced from personal preferences and to be able to calculate the financial benefits of alternative sites. When making such comparisons, one site should be used as a reference point and then the relative costs of sales transportation etc., of other options should be compared (Browning, 1980:56).

4.3 LOCATION THEORIES

4.3.1 Least-cost theory

Various authors who followed Weber (1928) asserted, that locations were determined by the desire to locate at least-cost sites. Some, such as Palander (1935), Schneider (1935) and Hoover (1937), were also interested in the size of the firm's market area and thus, in a sense, concerned with variable demands over space. The majority, however, disregarded the locational effects of varying demands over the landscape. Thus Predohl (1925) was interested solely in developing a substitution cost analysis. Cassel (1923), Krzyzanowski (1927), Englander (1927) and Isard (1960) also were interested in this theory. Ritschl (1927) researched the changing patterns of costs and locations over time. Linke (1930) and other students of Weber, stress labour and agglomerative differentials in explaining and measuring industrial displacements from transport centres. Holmes *et al.*, (1913) evaluated industrial orientations to materials, labour and markets.

4.3.2 The demand approach (location interdependence)

The Von Thunen approach applies to agricultural locations, and that of Launhardt and Weber applies to mainly certain manufacturing locations. The increasing awareness during the early post-World War II years of the limits to their cost-only framework, stimulated an opposite view of plant location.

Under the influence of Fetter (1924), Hotelling (1929) and Chamberlin (1946), interest centred on locational interdependence. This conception disregarded cost, since the costs of procuring and processing raw materials, were assumed to be equal at all locations, and explained the locations of firms as the endeavour to control the largest market space; in effect, the seller becomes a locational monopolist. Among other factors, locational interdependence requires appraisal of the shape (character) of the demand curve and the influence of site selection of entrepreneurial conjectures about rival firms' location policies. These considerations determine the degree of intra-industry dispersion over the landscape and the extent to which locational monopolies could arise and led directly to the generalisation given by the maximum-profit theory of plant location.

4.3.3 Theory of the maximum-profit plant location

August Losch (1944) touched on the core of the "location" problem, when he noted that to seek the location of lowest cost, is as wrong as looking for the site offering the greatest sales. He initially conceived of a homogeneous landscape in which a monopolistic producer sells over a circular market area. This conception led him ultimately (under a Chamberlinean perspective) to depict a spatial competitor whose long-run trading area is reduced in size to that of a zero-profit hexagon. This polygon minimises total distances from its centre to all points in the market area, whereas the hexagonal network fills the entire landscape. Within given industries, total effective demand is, therefore, maximised. Lewis (1945), in generalising his own picture of the ideal size and number of firms, recognised the hexagon as the market area that yields stable equilibrium.

Losch (1944), recognised that different industries would possess different-size hexagons, which in turn, would generate different inter-industry concentrations. Differential intra-industry costs would arise as a result of different agglomerations. Although he, therefore, recognised the variability of costs and demand at alternative sites over the now-heterogeneous landscape, he failed to combine an analysis of intra-industry cost and demand differentials in one model. Simultaneously, he disregarded the conjectural variations of entrepreneurs and the impact of cost differentials thereon. The fact that extraordinary concentrations of homogeneous (intra-industries) business units could, therefore, result was ignored, as he confined his frame of reference to an “ideal”, not actual, landscape.

4.3.4 Large versus small firms and price systems theories

When costs vary widely among location, large firms tend to concentrate, *ceteris paribus*, in the particular city or district, which is least in cost relative to the whole market area if doubt exists as to the probability of symmetrical locations. The location of the smaller firm is, according to this reasoning, somewhat more flexible. For example small plants disperse relatively more than large firms and frequently locate in less industrialised areas (Greenhut, 1996).

Different price systems generate different locations. The upshot is, that within certain well-defined limits of pricing, any plant locator tends to visualise different-size market areas over the economic landscape. When pricing and location are competitive, cost and demand are co-determiners of location (Thisse, 1975).

4.4 RELEVANCE OF LOCATION THEORIES

Although von Thunen's theory centred primarily on agricultural produce and its transport to a central market (the concentric ring idea), his analysis is used today in evaluating the location of activities within urban centres. In addition, whereas Weber took each plant location as a single point, his analysis underlies the operations research work used by multi-plant manufacturers in determining location choice. In corresponding form, Hotelling's (1929), insights into agglomeration, combined with the maximum-profit theory of location, explain the co-existences of small- and large-scale operations in the

industry. Perhaps most critically, the required evaluations of oligopoly locations and related utility-disutility conjectures apply to non-spatial issues, e.g. product differentiation, medicine, even the CAPM model of finance theory (Greenhut & Greenhut, 1991), and in a global context, the waves of direct foreign investments (locations) designed to avoid high transport cost and other barriers (Macload *et al.*, 1987).

Under this conception of economic ordering, it followed, that sellers could monopolise those buyers who were situated most approximate to their plants. The selection of a plant site thus involved attempts to remain at a distance from rivals. It followed, that the location of any one firm was dependent upon the status of its rival and that the primary aim of analysis was to emphasise those forces, which attract or repel competitors.

The final step is obvious: suppose both costs and demand are variables, where will a firm locate? Investigation of this question requires the conception of spatially separated buyers, while at the same time, considering the fact that costs may vary at alternative locations. Basically the problem of analysing the relative force of these two variables, involves appraisal of the effect of one on the other. By determining how costs influence the estimate of the plant locator regarding the site-selection of his rival, a forecast of the effective demand existing at alternative locations, can be had. Once this type of conjecture is made, the selection of the optimum location follows automatically.

While each of the stages of development is distinguishable from the standpoint of certain postulates, a unifying force exists; this common bond is found in the inherent assumption, that the selection of a plant site involves the quest for maximum profits. Thus each theory outlined above, is a maximum profit location theory, but to avoid terminological difficulties, the first stage is referred to as the least-cost theory of plant location, the second stage, as the interdependence theory of plant location, while the last stage is the nomenclature of the maximum profit theory of location.

4.5 CONDUCTING THE BUSINESS LOCATION SEARCH

Previous literature covered the theory around locations and how it developed along the years. These theories showed the importance of location as a decisive factor in

managing a small business, or any business for that matter. The question now arises: if the enterprise is not starting a new business, but is growing by means of capacity, should it relocate to a bigger and better location or should it just expand its current location?

4.5.1 Relocation versus expansion

The theory portrays that on-site expansion as the capacity increasing option, should be considered first, but it is fraught with some stubborn problems, particularly if expansion on-site has been a repeated practice. Remedies for these problems often take the form of new business site openings or business relocations. Opening a new business and relocating an existing one, however, are not substitutes for one another. One is a better remedy for certain of the problems with on-site expansion, than is the other (Schemenner, 1982:15).

In general, opening at a new location is preferable if problems apparent at the existing location involve product proliferation, workforce unionisation, job-bumping, depersonalisation in the quality of work life or to get a grip on rapid growth through careful management of multi-business strategy, generally favours opening at a new location. Table 4.1 summarises the relative advantages of new business locations and relocation versus expansion on-site.

Table 4.1 Relative advantages of new locations versus expansion-on-site

PROBLEM AREA	NEW LOCATION	EXPANSION ON SITE
Lay-outs and materials handling	Radical improvements possible	Radical improvements possible
New technology	New technology usually used at new location	Some technology usually used
Inventory control	Radical change to procedures and policies	Inventory levels more likely to be unaffected
Managerial impact	Additional managers required	Old managers generally used
Size of workforce	Keeps work force levels at locations under desired ceilings	Little or no effect
Financial burdens	Extra overheads and new location start-up expenses	Expansion expenses less than relocating
Ease of meeting future growth	Relatively easy. Geographic growth met best with new market area locations	Not easy. Shares many future capacity problems.

Source: Schemenner, 1982:17

While most businesses pass through location search and decision phases in more or less the same sequence, the ways in which they organise their searches vary markedly. The organisational scheme employed, range from highly centralised corporate analyses to much decentralised, division-based analyses with a number of different schemes in which division management and the corporate staff interact. Because of the essence of its study, it is essential to rather look at the search and decision process of SMME's. The location decision at smaller businesses, though sharing many of the same traits, has some generally distinguishing characteristics of its own. Among these characteristics, are the following.

- *Informal, top-down decision-making.* The "team of specialists" decision-making that prevails in the majority of large corporations, is less likely to apply to smaller businesses. Instead, the decision to locate a new plant originates most at of the top of the company and involves only a handful of top-level managers. More than in large companies, personal preference is likely to intrude on the decision process.
- *Local search.* In most instances, a small but growing company's second or third location is likely to be located within comparatively short range of its first plant. Transportation expenses to distant markets do not compromise most small companies' early growth, so geographic spread of manufacturing capacity is only infrequently required. Moreover, management development is a chronic deficiency of small growing businesses and a lack of management depth. Keeping plants within close proximity of each another, is a further argument.

Local search also complements the informality of the location decision process at smaller businesses. By staying in the local area, business management restricts itself to locations it either knows about first-hand or which it can easily scout. In so doing, it lessens the trauma of having to deal with the tremendous uncertainties the establishment of a second or third location can bring (Schemenner, 1982:25).

4.6 LOCATION CONSIDERATIONS

For almost all sizable businesses, the evaluation of a proposed business location includes a systematic consideration of its cost and benefits. The capital appropriations

request for the site, and the documentation that stands behind it, typically include a raft of figures and qualitative considerations. As much as can be quantified, should include the following.

- Site and site preparation costs.
- Construction purchases/renovation costs.
- Equipment costs.
- Labour and fringe benefit costs.
- Workmen's and unemployment compensation payments.
- Start-up costs (training, inefficiencies, etc.).
- Working capital requirements such as:
 - stock;
 - materials; and
 - accounts receivable.
- Freight in and freight out expenses.
- Taxes.
- Relocation expenses for managers and key staff.
- Forecast of the revenues expected to be generated by business.

Often both costs and benefits are combined in net present value (or internal rate of return) calculations which summarise the projected financial attractiveness of the location, the qualitative considerations that serve to support or to temper the financial analysis.

While the sophistication of the financial and qualitative aspects of the capital appropriations request and its supporting documents can vary markedly among small businesses, and while assembling the data usually requires repeated iterations before it

is accomplished satisfactorily, management generally feels comfortable with its review and evaluations. What makes the location decision uncomfortable for many businesses, are not the final steps of evaluation, but the initial steps of the process where potential sites must be generated to satisfy acknowledged capacity needs. It is in the initial stages of the location search where the non-standard, unfamiliar nature of the location search process and the complexity of the elements that need to be considered combine to create hesitancy in many managers. To overcome this hesitancy, businesses should simplify and systematise this process by considering, evaluating and measuring all the relevant location factors applicable to that specific SMME (as will be discussed later in this chapter (Schemenner, 1982:32).

4.7 LOCATION FACTORS AS REVEALED BY THEORETICAL AND EMPIRICAL STUDIES

Conclusions from the first part of this chapter (location theories), suggest that location factors are divisible into three broad groups.

- Demand
- Cost
- Purely personal considerations.

The demand and cost determinants are influential in all site-selections. Personal considerations, which partially determine the demand for a good and/or its cost of production apparently, influence many small plant locations. The personal considerations of the psychic income type appear effective in the site selection of some SMME's (Greenhut, 1995:76).

Demand factors

According to Greenhut (1995), these demand factors include the following.

- The shape of the demand curve for a given product.

- The location of competitors, which, in turn, partially determines:
 - the magnitude of the demand, and
 - the cross-elasticity of demand at different places.
- The significance of proximity, type of service and speed of service.
- The relationship between personal contacts and sales.
- The extent of the market area, which itself is determined partially by cost factors and pricing policies, and the dispersion of buyers.
- The competitiveness of the industry in location and price – certainly and uncertainly.

Cost factors

The cost factors are also divisible into the following several sub-groups.

The cost of land, which includes the -

- rent of land;
- tax on land;
- availability of capital, which partially depends upon:
 - the banking facilities and financial resources, and
 - personal contacts.

The cost of capital, which is also partially dependent upon the -

- banking facilities and financial resources;
- type of climate;
- insurance rates at different sites, which, in turn partially depend upon the -
 - banking facilities and financial resources,
 - police and fire protection, and

- type of climate.
- The cost of fuel and power, which is partially dependent upon -
- natural resources,
- topography, and
- climate.
- The cost of labour and management, which is influenced by -
 - the health of the community, the park and education facilities, housing facilities, wage differences, etc., and
 - state laws.

The cost of materials and equipment, which is partially determined by -

- the location of competitors (sellers and buyers),
- the price system in the supply area (equalising or other forms of discriminatory delivered prices),
- the extent of the supply area, which in turn is partially dependent upon -
 - personal contacts
 - price policy

The cost of transportation, which is partially determined by

- the topography, and
- transport facilities.

Personal considerations

The extent to which the minima principle outweighs the quests for maximum profits including -

- the importance of psychic income (size of business),

- environmental preferences, and
- the security motive (Greenhut, 1995:66).

The above list of location factors, possibly, appears to be an entrée toward only a short-run understanding of location in a free market economy. If the zone-delivered system of rating by transport agencies were included in the above list, and such price systems as the delivered prices ones, a short-run capitalistic focus would be emphasised. The discerning reader might realise that abstraction from certain man-made (institutional) forces in the above list, is all that is necessary to gain the long-run picture of *underlying forces* of location in a free market economy. For, if being held at delivered price systems and their like are distortive of economic plant locations, abstractions from them, such as by assuming price systems (in and out), lead us toward the understanding of the basic free market forces of location. For such a type of focus, we are left then, with only some cost factors, some demand forces (such as locational interdependence under ill pricing, certainty and uncertainty, and their like) and personal factors. These factors are part of the system of plant location in a free market economy, regardless of whether the particular focus is short-run or long-run. In summary, we exclude in the long-run focus the distortive types of man-made forces, such as freight rate zones, discriminatory pricing, tax incentives and state and federal laws (Greenhut, 1995:67).

It is of sufficient academic interest to note, that the list proposed above, pertains to even such an economy as one where there originally existed an equal distribution of resources and equal dispersion of demand, and further, that the hexagonal equilibrium system traced by Losch (1938), for such an economy, would not come about. Trading areas of different products lack identity, which conditions lead to agglomeration cost advantages at certain locations, and which, in turn, elicit uneven distribution of population. Concentration of population at diverse places promotes differences in cost and demand and profitability of market areas. Theoretical emphasis on either cost or demand alone suffers from the logical omission of failing to carry its analysis far enough.

The list proposed above, focuses attention on the natural existence of different costs and scattered demand. It is not only inclusive of forces affecting short-run locations in a

free market economy, but, by subtracting special man-made forces, the pure (or basic) forces determining long-run locations in a free market economy, are also revealed. Furthermore, if the personal factor, and the interdependence factors that are based on uncertainty, are in turn subtracted from the reduced list, the forces of location for a totalitarian economy are laid bare. The location forces of any economy include then, the cost factors of Alfred Weber, with a few minor additions (as included in the list above) and the demand factor that finds its broad expression in the different sizes of market areas that are open to the locator. Ignoring the several facades of demand is logically fatal to even those writings, which attempt to generalise the subject by finding the underlying location forces of any economy (Greenhut, 1995:68).

The literature, therefore, has a definite problem of a general theory of business location in a free market economy. Nevertheless, from the above list of location factors, three possible theoretical choices exist regarding the explanation of business location in a free market economy.

The following two special theories are important.

- A maximum-profit location theory in the nature of the integrated theory suggested earlier.
- A maximum-satisfaction theory.

The initial theory probably describes most plant locations; the maximum-satisfactory theory (designed to account solely for locations of the psychic income type), explains some site-selections.

- A general maximum-profit theory of location, which attains its generality by defining psychic income, is a part of maximum profits. This type of integration requires imputation of non-pecuniary motivations in the opportunity wage cost charged to the firms.
- A general maximum-satisfaction theory, which by definition, makes either maximum profits, or maximum pecuniary plus non-pecuniary returns equivalent to maximum-profit theory, that includes and imputed psychic income; but, it is somewhat less

satisfactory that this general maximum-profit theory, for the assumption of economic man motivated by pecuniary returns must be given up. Thus, while its basic postulates have greater public validity, a possible loss in econometric type of research possibilities may overcompensate the attainment of generality. It may even be best to disregard non-pecuniary returns entirely in the basic location models, and thus to formulate a general theory upon the maximum-profit location theory cited above (Greenhut, 1995:68).

4.8 LOCATION FACTOR CONCEPTS

Even though SMME's emphasise the word *small*, growing entrepreneurial ventures are fundamentally maximised. Either they maximise profits, or they maximise size in the long run, or both. Profits constitute the difference between revenues and costs. If revenues do not vary by location, then the least cost location will be the maximum profit location. Conversely, if costs do not vary over space, then the maximum revenue location is the maximum profit location. In reality, both costs and revenues vary simultaneously and often irregularly, and location solutions are only approximations of the best combinations of at least costs and maximum revenues (Greenhut, 1995:69).

Small businesses emphasise revenues when making location decisions. Many times their most important location factor is the market. They are also consequently concerned with both the revenues and cost dimensions of the location calculus. Typically, they attempt to minimise costs within specific geographic context, but the location of markets (therefore, revenues) are usually critical in establishing the more general geographic region within which costs are minimised. Market orientated locations decrease transport costs, but they can be even more important when service times are decreased and sales are increased. In addition, the critical labour issues are as much availability and productivity as they are simple wage rates, and better trained labour often is easier to obtain in the same areas that contain the major markets (Laulajainen & Stafford, 1995:15).

Still, there are no perfect locations. More precisely, it is impossible to determine the optimum locations because of lack of data techniques, which become too complex

when burdened with many variables, and because of uncertainty – uncertainty about the future and uncertainty about the actions of competitors, suppliers and customers. There are no single factor locations either. Each location decision reflects the substitution of the relative advantages of some variables against the disadvantages other variables exhibit at the same place. For example, nearness to markets and access to adequate labour supplies may have to be traded off against either wage rates or land costs. Spatial variation is as important as the magnitude of the variable. For example, even if the firm's largest outlay is for labour, if these costs do not vary significantly over space, then labour is not a locational variable for searches within the country.

Locations have two major aspects, namely *situation* and *site*. A land area's situation is its location relative to other important spatial distributions, such as nearness to the market or centrality within an adequate trade area, or accessibility by a labour force, or nearness to corporate headquarters or other units of the firm, or location relative to the locations of competitors. Site factors are the absolute measures of the relevant physical characteristics of a specific parcel of land. Often included, are parcel size, shape, topography (especially slope), drainage, soil characteristics and load bearing capacity, highway or street frontage, traffic counts, visibility and ease of ingress and egress. In location searches, situation should always be determined before site issues are addressed. Within any desired general area (situation) there will be several accepted sites from which to choose. The search always should proceed from the global scale to the local scale. It should proceed "down" the geographic hierarchy, but reality is often at variance with the preferred (Laulajainen & Stafford, 1995:16).

Numerous factors might be taken into account when deciding where to locate a business. However, relatively few factors are really important. One broad classification places the factors, relating to the friction of distance in one group, and those, relating to the attributes of areas in the second group. The first group includes all those, which account for the costs (money, time, service) of getting products and/or people from location A to location B. These are the transportation costs from suppliers, and to markets, and communication costs. The second group contains all the important attributes of areas, including labour characteristics, infrastructure, governmental influences (subsidies, taxes, regulations, etc.) and quality of life. An alternative

classification is to distinguish between those location factors, affecting costs and those affecting revenues (sales). The first group consists of the various inputs, which are needed in business, the dominant ones being materials (raw materials, intermediates, parts and components), labour, land and public interference such as subsidies and taxes. Sales, of course, are of the outputs of the business, and market access or market closeness is the location concern (Laulajainen & Stafford, 1995:17).

As stated before, no location decision is the product of a single factor – it is, therefore, important to examine the major variables or factors that influence the location decision independently.

4.9 VARIOUS LOCATION FACTORS

The geographical location usually refers to the premises that will be needed to produce the products or render the services. Making an informed and calculated choice of location, is of extreme or even vital importance for an enterprise. Depending on the nature of the product or service that is to be offered, the entrepreneur should, for example, decide whether the enterprise needs to be located near its market, its sources of raw materials, close to other competitive enterprises, in the city centre, the suburbs, a rural area, in an existing industrial area or anywhere the entrepreneur prefers. These are referred to as location factors (Van Aardt & Van Aardt, 1997:50).

The location of an enterprise involves a relatively complicated decision. There is no “perfect” or “right” location. Some places may be better than others at a given time. In a constantly changing environment, the factors, which influence the choice of a location may also change with time (Marx *et al.*, 1998:226).

The modern pattern of decision-making about location, is influenced by the following five basic principles (Marx *et al.*, 1998:227).

- The growth of suburbs, towns and surroundings communities.
- The development of industrial centres.
- Decentralisation, geographic distribution and plants of large concerns.

- The increase in competition between cities for enterprises.
- Increasing pollution and control measures.

The following are the most important location factors that the entrepreneur should consider.

Sources of raw materials

Where, in what quantities and quality and at what prices are the most important raw materials available? The number of suppliers and their prices, the cost of transport of these raw materials to the point of location and the perishability of the raw materials, should also be considered (Van Aardt & Van Aardt, 1997:50).

Location near the source of the raw material is often essential in cases where:

- the raw material is perishable;
- large quantities of waste are produced, and
- transport costs for the raw material form a considerable cost component (Marx *et al.*, 1998:273).

The business must, at all times, be able to procure adequate supplies and materials at the right price and of the best quality (Adendorff & De Wit, 1997:39). The attractiveness of locating near the source(s) of raw material inputs, other things being equal, is to:

- save on transport costs;
- conserve perishable commodities;
- keep the value added at home (Laulajainen & Stafford, 1995:17).

The availability of labour and other human resources

The availability of the right quantity and quality of labour required by the enterprise at a fair and equitable remuneration, is an important location factor (Marx *et al.*, 1998:273). Where and at what cost is sufficient labour of the right kind available in terms of, for

example, levels of training, type of skills and experience, development potential and productivity (Van Aardt & Van Aardt, 1977:50). Suitable labour pools are important because of the fact that labour is the life-giving production factor. It must be possible to employ the right kind of labour, meaning that the workers should possess the necessary schooling, education, experience, drive and other characteristics. Unrest areas, where workers often go on strike and make unreasonable demands, should rather be avoided. The productivity of the workers is also of crucial importance – should they not possess the necessary knowledge and skills, it must be possible to train them (Adendorff & De Wit, 1997:39).

The importance of labour as a location factor is connected with -

- availability;
- direct costs (wages and fringe benefits);
- productivity; and
- skills.

In practice, they are interrelated, but are now being as far as possible addressed individually.

- **Availability**

The fundamental aspect of labour is its availability - a balance of need and supply. Supply is affected by labour's mobility and (re-) training potentials. Training is generally considered worthwhile only up to an age of about 45. The problem with training older workers, is the work-life remaining in which to repay the human resource investment. The age structure of available labour is, therefore, important. Mobility has two dimensions, daily commuting and relocation to a new area. For most, non-managerial labour, 45-60 minutes is about the upper limit of meaningful commuting distance, world-class metropolitan regions excepted (Laulajainen & Stafford, 1995:21).

- **Direct cost (wages and fringe benefits)**

The direct price of labour, ignoring productivity, is its hourly wage or monthly, salary plus any fringe benefits. Variations in direct labour costs between regions within a country can be large. The variations between countries can even be larger. Some types of businesses in some industries are more attracted to, and more able to take advantage of, low wage labour supply areas. The generalisation is, that relatively unsophisticated businesses requiring less skilled workers, are more likely to be located in low-wage peripheral areas with ample labour pools. The opposite is also true (Laulajainen & Stafford, 1995:25).

- **Productivity**

A worker earning twice as much as a second worker is no more expensive to the employer if he or she produces twice as much. As soon as the highly paid worker produces at a rate above the nominal pay rate differential, he or she actually becomes a bargain, assuming that the quality of work produced is equal. The real cost of labour is clearly as much a consequence of productivity as it is a relative concept and that it is quite hard for the small businessman to measure productivity effectively, for example, how does the entrepreneur know if a city A's productivity is higher than, that of city B?

- **Skills**

The quality of labour clearly has several aspects. Apart from productivity, another is the capacity, or skill, of the labour force to manage a certain work process and to produce a quality product.

- **The proximity of and access to the market**

Here, consideration should be given to aspects such as potential advantages over present competitors, the current extent and the potential development of the market, the perishability of the finished products, the consumers' need for rapid deliveries, after-sales services and personal contact, as well as the possible entry of competitors and substitute products or services into the market (Van Aardt & Van Aardt, 1997:50).

The spatial distribution of the market for many is the single most important consideration in the location and continued prosperity of commercial enterprises. An established business has a fair idea of its market, actual and potential. For many products, the number of people in an area is a meaningful measure of market size. For other products, however, total population is not a sufficiently sensitive measure. For many small businesses location in the heart of the market is almost the only issue. As long as there is sufficient demand within an area, that is, the threshold requirements are met, a business will establish a physical presence. A business in a poor location probably will soon be out of business or will shift to a substantially different activity. Customers will not travel any farther than necessary to reach an acceptable retail outlet. From the small business point of view, there is a very sharp distance-decay effect. For most stores selling everyday merchandise, 75% of sales come from customers residing or working within 15 – 30 minutes travel time of the business. For more exclusive store the travel may be one hour, but few businesses ever get much business beyond the one-day radius.

A business with large floor area and deeper and broader assortments will draw customers from greater distances than smaller operations and probably will penetrate its close by area more thoroughly. This is reflected in a distance decay curve, which has a higher intercept and slopes down more gently than for a small business. Business size is an important competitive parameter. This is a variation of the tension between economies of scale and the friction of distance, and holds equally well for malls and CBD's as for stores (Laulajainen & Stafford, 1995:53).

Adendorff & De Wit (1997:39) mention, that three further aspects regarding access to the market are important.

- *Stability.* Businesses that operate in predictably ongoing ways, free from major unexpected shocks, are said to be stable.
- *Simplicity.* Using programming to implement a deliberate strategy is most appropriate in businesses that are simply enough to know what the right strategy is before the fact.

- *Capital intensity.* This is the extent to which the firm has invested in capital equipment.
- *Importance of the growth potential of the market.* A location should be chosen in such a way that good profits can be generated from the customers in the market. Attention must be given to the future growth potential of the population and the disposable income of that population.
- *Distance from the market.* It is not always possible to locate near the market. Some products or services are marketed country-wide and it consequently does not matter where the business is located. Location near the market has the advantage that close contact can be established with intermediaries. This strengthens the business's competitive position, while the necessary control over quality is maintained. Efficient after-sales service is also possible.

Premises near the market could be so expensive, that it may be uneconomical to locate there. Locating near the market, can also mean that a business may be inclined to compete intensively with its competitors. The increased costs can cause the business's profitability to decrease unnecessarily.

- *Facilities for consumers.* Provision must be made for the necessary facilities that will positively influence the consumer's support motivation. The location must be chosen in such a way, that there are adequate and convenient parking facilities. For easy access, it should preferably be near to public transport facilities. Matters such as adequate air-conditioning and the creation of a pleasant atmosphere, are also important, particularly when locating service businesses (Adendorff & De Wit, 1997:39).
- **The availability of transport facilities**

This includes the possibility of using own transport, the suitability of roads and limitations on private transport. It also includes aspects concerning the necessity of using hired transport by rail, air, road and sea. The transport costs of raw materials in

relation with finished products and the cost of transport of finished products to consumers should also be considered (Van Aardt & Van Aardt, 1997:50).

Transport facilities also include suitable roads, railway lines and where appropriate, harbours for waterborne transport and/or suitable airports for air transport. The business premises should be within easy reach of one or more of these modes of transport, so that raw materials or finished products can be transported as quickly and cheaply as possible (Adendorff & De Wit, 1997:40).

- **The availability of power and water at a reasonable price**

The correct type of power, such as electricity, steam or gas, may be necessary for the supply of mechanical power, heating, cooling, lighting, etc. Water could also be used in the process for supplying steam, the removal of waste, cleaning or even as a raw material in certain production processes, e.g. manufacturing of soft drinks or beer (Van Aardt & Van Aardt, 1997:50).

Adequate power, as required by the specific productive unit, must be available at the proposed location. Most countries are fairly self-reliant as far as the various sources of power are concerned (Adendorff & De Wit, 1997:40).

Water can be used as a source of power, as well as a raw material for certain processes. As a power source, water is used to produce steam and as a raw material, it is essential in the manufacturing of soft drinks. In many geographical areas water is a relative scarce commodity. Businesses using a great deal of water, should preferably be located in areas where water is plentiful and cheap. Fortunately bodies like the Rand Water Board in South African constantly develop new sources of water, as in the case with the Lesotho Highlands Water Scheme (Adendorff & De Wit, 1997:40).

- **The availability of a site and buildings**

These should be of the required size and appearance, with the necessary facilities and possibilities for extension. The price at which the premises can be purchased, rented or developed, the cost of extensions or important improvements, should also be considered. Consideration should also be given to accessibility for the surroundings

and the presence of unpleasant, harmful or even dangerous neighbouring institutions such as abattoirs, chemical or explosive plants or other factories (Van Aardt & Van Aardt, 1997:50).

The usual qualifications of a site are, that the land parcel is of sufficient size for current needs and with room for expansion, regular in shape, level, of good geo-technical quality (gravel or sand rather than clay or silt), accessible and reasonably priced. Insufficient size of the site is a frequent problem for businesses in older industrial areas, and especially in inner cities (Laulajainen & Stafford, 1995:36).

- **The availability of capital**

This needs not necessarily have a direct effect on the choice of a specific location for the enterprise, but can still play a role where the suppliers of capital (owners, partners, shareholders, private money-lenders, development corporations, Department of Trade and Industry or other financial institutions), for example, set specific conditions or express certain preferences in this regard, or where capital is such a limiting factor, that it necessitates the choice of the cheapest location for the enterprise (Van Aardt & Van Aardt, 1997:51).

It is important for any business to attract adequate capital at the lowest cost. The question may arise as to whether sources of finance constitute a major location factor. In a country like South Africa, a widespread network of banks and similar financial institutions exists, and most of them are fairly easily accessible. This means that management will be more inclined to consider locations where there is at least a bank where the money can be safely kept (Adendorff & De Wit, 1997:39).

It must be stated, that the above factor does not really apply anymore in today's society – all small businesses do have a need for capital, but the infrastructure regarding capital availability is almost available, anywhere in any business environment.

- **The attitude, regulations and tariffs of local authorities**

The aspects that have to be considered in this regard, are for example, the attitude of local authorities to industrial or small business development, including possible

concessions of encouragement, as well as health regulations, building regulations, property rates, water and electricity tariffs, and the availability and costs of other municipal services. Local authorities charging outrageous tariffs and offering inadequate infrastructure and/or services, should rather be avoided (Van Aardt & Van Aardt, 1997:51).

- **The existing business environment**

This could influence the establishment of the proposed venture by, for example, the provision of repair and maintenance services, as well as the availability of spares and banking, postal and other communication facilities. The extent to which the proposed venture could provide repair and maintenance services to other businesses in the area if such services are not available, should also be considered (Van Aardt & Van Aardt, 1997:51).

- **The social environment**

This concerns the provision of satisfactory housing and educational, medical, recreational and shopping facilities for employees of the proposed enterprise (Van Aardt & Van Aardt, 1997:52).

- **The climate of the region**

Some production processes require a particular type of climate that can influence the recruitment and retention of personnel as well as the promotion and maintenance of their productivity (Van Aardt & Van Aardt, 1997:51).

- **Central government policy**

Government has become an important factor in small business location. Its influence has been felt, especially in the location of some types of SMME's, through government-financed facilities, certificates of necessity, dispersion programmes, aid to depressed areas, and the general tax and tariff programmes (Hunker & Wright, 1963:87). This may encourage or discourage the establishment of certain types of enterprises in specific areas in a direct or an indirect manner through, for example, tax concessions.

Funding of a venture in rural areas, that could be obtained from the Department of Trade and Industry, should also be considered (Van Aardt & Van Aardt, 1997:51).

Governments also levy taxes, grant subsidies, impose controls and establish environmental rules. They influence location decisions via trade barriers and monetary policies, as expressed by rates of exchange, for example. Especially the influence of taxes on business locations, is widely and hotly debated. There is a common public perception, that businesses are strongly influenced by spatial variations in tax rates and tend to choose low-tax areas.

Within the past two decades, environmental legislation has assumed major proportions as a location influence. It is not on almost every list of location factors, because of the strong movements in environmental management and other comparative issues (Laulajainen & Stafford, 1995:38).

- **Business climates and quality of life**

It is possible, with many assumptions and guesses about the future, to assign some numbers to items like material loss in processing, labour costs, taxes, and even productivity, and add them. More elusive, but still real, are perceptions about places which bias location decisions. Enterprises are concerned about the "business climates" of the areas in which they operate. The larger and more fixed the investment, the greater the concern. Internationally the major issue is political stability, although legislation about and treatment of foreigners and its application, also are of concern. It is difficult to measure political stability. Political violence, frequent changes of government, and ethnic and religious diversity are traditional indicators. Another, more comprehensive approach, is to rely on experts who give their opinion about a number of core characteristics, to be weighted as to perceived importance, and thereafter added to a comprehensive score (Laulajainen & Stafford, 1995:49).

- **The personal geographical preferences of the prospective entrepreneur and his or her family**

The factors that could play a role here, are the availability of schools for children, familiarity with the area, recreation facilities, shopping centres, sports clubs, good

medical services, schools, the necessity for moving house or even security or other uncertainties (Van Aardt & Van Aardt, 1997:51).

Marx *et al.*, (1998) divide all the above location factors mainly into two categories, namely primary considerations consisting of -

- the potential market;
- infrastructure;
- raw materials; and
- availability of labour;

and secondary considerations, consisting of -

- climate;
- government intervention;
- political situation;
- available premises;
- availability and cost of capital; and
- personal considerations.

According to Browning (1980:12), the location-decision factors can also be grouped into two categories (Table 4.2): those that lend themselves to quantitative evaluation and those that tend to be judged informally by management.

Table 4.2 Important formal and informal location judgments

	Quantitative factors	Qualitative factors
Resources	Land costs Raw material costs Subcontracting costs Transportation costs Utility rates Labour costs Energy-fuel availability	Land availability Availability of skilled and unskilled labour Labour productivity Transportation availability
Local conditions	Construction costs	Culture Community receptivity Worker attitudes and work ethics Unionisation in area Proximity to markets Quality of life: climate, housing, recreation and schools

Source: Browning, 1980:12

The problem with today's modeling techniques, suggest Ebert & Adam (1977), is that most tend to focus on transportation costs, which " ... may or may not be the critical factor in location, depending on resource requirements, the technological process, the product, and markets ... rarely can be a facility location problem of moderate complexity be solved with formal analysis only", observe Ebert & Adam.

Expanding on that idea, they point out, that the decision to locate a new facility, usually means that employees will be hired from within the new location. It also means, that the organisation must establish appropriate community relations to "fit into" the location as a good neighbour and citizen. The managerial style and organisational structure must be adapted to the economic, political, religious and social differences at different locations. The facility must be aware of, and adapt to, the norms and customs of local subcultures. Whereas an authoritarian leadership and managerial style may be well suited to one

location, a democratic participative approach may be appropriate in another (Ebert & Adam, 1977:35).

When more than one location have been identified, all possible locations have to be assessed in terms of the above factors and the best one then chosen. This assessment would be a relatively easy task, if all the location factors played an equally important role in the location of a specific enterprise, and if all such factors could be quantified in monetary terms. Unfortunately, this is not the case. All the applicable factors should nevertheless be considered when selecting a location.

To succeed in this, various models have been developed which can be used when assessing location factors that can be expressed in monetary terms, as well as those that will be assessed subjectively in the choice of a location. Consequently, the overall influence of all applicable location factors on each of the potential locations can be quantified and the most advantageous location can be determined.

It needs to be stated, that every different enterprise concern, for example manufacturing, retailing, services, etc., has got their own identifiable location factors which will all carry different weights for each concern. Therefore, the nature of each enterprise is vital in deciding on location factors (Marx *et al.*, 1998:268).

4.10 THE LOCATION DECISION

The sum of the location decisions of a business produces its corporate geography. The location decision for each unit is based on some combination of the location factors discussed previously. The problem might be conceived as simple – choose the location that will produce the maximum profit. In reality, the problem is extremely complex, and in an absolute sense unsolvable. There are several complications. The first is that profit is not the only motive in the location of a small business. Other motives include stability and market share. However, even if the profit motion is assumed, what is the solution over the short- or long-term? And how are uncertainties dealt with. Many of the data desired are unavailable or of dubious quality. The actions of suppliers and competitors cannot be forecast with certainty. Future markets can only be guessed.

Still, location decisions must be and are made every day, by assuming that the best available data and forecasts are adequate. But even with such heroic assumptions, location decisions are complex. The first complexity is that the size, type and location of a business are inexorably intertwined, but the process of practical decision-making demands that either location or type and size take precedence. Thus, the choice is to locate first, then to adapt the business to the environment in which it is placed, or to make a *prior* decision on how large the facility will be and on its product mix, and then search for an acceptable place to locate it. In location theory terms, the first is a "Von Thunen" type choice, when the question is: "Given this location, how should it be used?" The answer is relevant in densely built-up areas; city centres for example, where retailers must usually adapt operations to the leases available. The second is a "Weber" type choice, when the question is: "Given this type and size of facility, where should it be placed?" (Laulajainen & Stafford, 1995:61).

The next complexity arises from the fact, that profit is the difference between revenues and costs; however, a least cost location is probably not a maximum revenue location. It is possible to calculate the difference between revenues and costs at any location, but the calculations become quite complicated, and a straightforward solution is not possible. This is because the process is circular. Costs influence sales, and thus revenues, and sales levels, in turn, influence costs per item produced. There are techniques for calculating the optimum, under restrictive assumptions, but such exercises belong to academic treatises, rather than to practical business life.

The third complexity, is that all locations should be available for selection, but in reality selections are made between relatively few places. In theory, "all locations" are innumerable (space is infinite), but in practice locations are selected from among a finite set of possibilities. Search costs and consequently searchers, are limited (Laulajainen & Stafford, 1995:62).

Once all the major location factors as discussed previously have been listed, the question arises as to where the small business concerned should be located. The relevant problems arising from these location decisions are the following.

- ***Not all the location factors are of equal importance***

The availability of adequate fresh water of a very high standard is, for example, of critical importance to a brewery.

- ***Various location factors comprise a number of variables***

In discussing infrastructure, for example, many variables like roads, electricity, etc, were mentioned. Each of these variables complicates the choice of the correct location.

- ***Not all location factors can be expressed in monetary terms***

An example is the personal preferences of the entrepreneur and his personnel.

- ***Some businesses produce a wide variety of products***

It may be better to produce / sell some products / service in one region, while others may be better suited to another. A decision must therefore be made whether the business will establish itself at one of these places, or whether it will rather establish a number of productive units for the various products / services.

- ***The importance of most of the location factors will change over time***

Perhaps a business could get by without a great deal of electricity to start off with, but it may grow so much, that electricity eventually becomes more important.

- ***Establishing a small business location should not take up too much of the entrepreneur's time***

Because it is only one of many things with which management concerns itself, the above statement unfortunately happens quite often. It could result in the wrong decision being made (Adendorff & De Wit, 1997:41).

4.11 QUANTIFYING THE LOCATION DECISION

In order to solve the location-decision for a small business, certain quantitative methods have been developed to help management. One of the practical applications of quantifying the location-decision is the Brown-Gibson model, as discussed below (Adendorff & De Wit, 1997:42).

- Identify the location factors relevant to the particular situation.
- Identify two or more location alternatives.

This weight must indicate the relative importance of a factor in terms of other factors. Taken together, these weights should not exceed the figure 1,00.

- Judge each location factor on the basis of a scale that runs from 1 to 100.
- Multiply the weight of each location factor with the figure between 1 and 100 allocated to each.
- Add the figures of each alternative.
- Choose the alternative with the highest final score (Adendorff & De Wit, 1997:42).

Another practical application on quantifying the location-decision, is the following model of Van Aardt & Van Aardt (1997:52).

Assuming that a proposed enterprise is considering only two alternative locations, A & B, the following procedure for making the most advantageous choice, could be followed.

Step 1 The first step is to establish the location factors applicable to the proposed business enterprise (just like the Brown-Gibson model). This could be different for each business venture.

Step 2 After the appropriate location factors have been established, a weighting (1-5) must be assigned to each factor to give a sense of its importance. If it is extremely important, it should be given a weighting of 5, whereas if it is of very low importance, a weighting of 1 to 2 could be given. However, if the location factor is only moderately important, the weighting should be 3 or 4.

Step 3 Calculate as accurately as possible the cost per location factor for both of the locations. The factors that cannot be quantified should be evaluated against the requirements set for a specific location factor and be given a rating (1-10) as to how well it meets the criterion. If the idea fulfills all possible aspects of a criterion, it would receive a rating of 1. On the other hand, if it only partially satisfies the criterion, it might receive a 4 or 5 and if it does not satisfy the requirements, it should get a 9 or 10.

Step 4 List the information gathered in steps 1 to 3 in a table (see Table 4.3).

Table 4.3 A comparison of two location options

Location factor	Location A	Location B	Weighting of location factor
Transport cost	R12 000	R10 000	5
Competition	4	5	3
Community acceptance	3	4	1
Office rent	R14 000	R12 500	3
Electricity	R9 600	R8 000	2
Personal preference	2	5	4

Source: Van Aardt & Van Aardt, 1997:52

Step 5 Calculate the disadvantages connected with both locations and determine the ratio between the disadvantages of locations A and B by using the following method.

$$\begin{aligned}
 & \frac{\text{Location A}}{\text{Location B}} \\
 &= \frac{12\,000 \times 5}{10\,000 \times 5} \times \frac{4 \times 3}{5 \times 3} \times \frac{3 \times 1}{5 \times 3} \times \frac{14\,000 \times 3}{12\,500 \times 3} \times \frac{9\,600 \times 2}{8\,000 \times 3} \times \frac{2 \times 4}{5 \times 4} \\
 &= \frac{1}{2.58}
 \end{aligned}$$

It is clear from the result, that the disadvantages associated with Location A are less than those associated with location B (Van Aardt & Van Aardt, 1997:53).

4.11.1 Evaluating location by means of the mathematical method SLAM

Many models have been developed to predict the performance potential of small business enterprises. Very few of these approaches have lent themselves to everyday use by entrepreneurs. Very few small businesses are known to incorporate a mathematical model in their assessment of new business locations. More importantly, few modeling approaches have been developed to assess the performance of existing SMME's against measurable criteria. The Store Location Assessment Model (SLAM) was developed to satisfy several key criteria: namely, it required a rigorous academic basis, whilst being of direct relevance to multiple businesses in that it had to be easy to use and inexpensive to develop, producing meaningful, accurate results. This model has also shown the benefit of its being used as a general small performance evaluation tool (Simkin, 190:33).

The work, initially commissioned by a leading UK retailer of consumer electrical goods, was initiated in order to develop a mathematical approach to the assessment of new business openings. In order for Simkin (1990) to produce a viable, yet innovative model, it was necessary first to examine published work concerning plant location. A wide range of techniques exists: subjective checklists, analogues / comparisons with existing stores, central place theory, spatial interaction models, and multivariate statistical approaches.

The early checklist was simply a list of factors (as discussed in an earlier section) to consider during a field study of a location. This technique has been refined and is now the most commonly adopted approach, for example the Brown-Gibson model. The second most popular technique – also subjectively or intuitively assessed – is the analogue study; the comparison of the proposed store / site with similar existing stores in the business's portfolio in analogous areas. The original spatial interaction models were the first of the mathematical approaches developed, based on Reilly's Law of Gravitation. These have been developed into intervening opportunities models and multiplicative interaction models. For the small business, however, these approaches are perceived as being too complex, requiring rigid – and often unrealistic – data inputs,

computer and technical facilities, and a great deal of time and patience (Simkin, 1990:33).

While many mathematical models have been created, there is a dearth of operationally predictive models capable of reproducing meaningful and usable information for a business's management. The literature contains a predominance of purely descriptive or highly theoretical work, which is not relevant for extensive application by many SMME's. Most businesses know their shop-fitting, start-up and operating costs, and can estimate profitability once they have projected turnover figures. Turnover is, therefore, the dependant variable. The determinants of turnover are the following.

- ***Competition***

Competition has two roles regarding performance: (i) it attracts purchasers of a particular good to the business, and (ii) it competes for such business with the branch being located or assessed. Variables include the number of competitors, the degree of competition over various product groups, proximity to the store being assessed, competitor's size characteristics and prominence, number of personnel, number of tills, type of ownerships / brands, geographic spread, promotional spend, pricing policies and customer service levels (Simkin, 1990:34).

- ***Trading area composition***

The quality of the location is a measure of its pull on consumers, relative to the pull of neighbouring centres. As a guide, the presence of many key traders or magnets, of many competitors' stores, of amenities which attract people to a certain location, is an indication of the attractive quality of a location. Variables include the number of key traders in the area, their quality and proximity to the business being assessed, market halls, main post offices, and shopping centre amenities such as hotels, cinemas, theatres, sport facilities, night clubs, etc. (Simkin, 1990:34).

- ***Catchment area demographics***

Clearly the spending potential of the business's catchment area population is determinant of its performance. A demographic profile of the area must match that

of the enterprise. In most countries demographic socio-economic databases are available, dividing the population into many lifestyles / social and economic groups, producing a consumer profile for each geographic area. Employment patterns and social trend data are also widely available (Simkin, 1990:35).

- ***Store accessibility***

The business must be clearly visible and readily accessible to the consumer. Pedestrian traffic passing the business, proximity of bus/tube/railway stations/bus stops/taxi ranks and car parking, the ease and cost of parking are important considerations (Simkin, 1990:35).

- ***Store characteristics***

The physical attributes of the business must match the requirements of small business and of its consumers/customers. Business size and layout, net selling space, entries, business frontage and prominence, age, refurbishment level, rent and rates, number of employees, storeroom and delivery arrangements are key attributes (Simkin, 1990:35).

4.11.2 The SLAM modelling process

The intention is to determine what affects the performance of a business's existing outlets, either to be able to predict performance levels of new openings or to set performance targets of current locations. The survey provided a general list of which variables to consider, namely the main categories of location factors. On the whole, businesses consider similar variables, but the relative importance of these variables differs from business to business. Based then on an analysis of the business's current stores, literature suggests, that a polynomial regression equation (an analogue multivariate statistical approach), with turnover the dependent variable, will lead to rapid pay-off. Stepwise regression reduces the 60 or 90 potentially relevant independent variables (factors) to, typically, 12 to 16 variables, with an adjusted *R* square of around 0,80 (including polynomial variables).

$$T_s = \alpha + \sum_{n=1}^m \sum_{i=1}^I b_{n,i} X_{s,n}^i + U_s$$

where T_s = the dependent variable (turnover) for store S;

$X_{s,n}$ = independent variables n for store s;

α = constant term;

$b_{n,i}$ = coefficient of variable n at power i;

U_s = error terms for store s.

The independent variables (factors) come from the main categories of determinants for turnover, namely: competition, trading area composition, catchment demographics, store accessibility and store characteristics.

The model's validation is in three stages. First, the equation developed on the estimation sample – half of the stores – is used to predict the turnovers of the remaining stores in the hold-out sample, and the predicted figures are compared with the actual figures for turnover. Second, this is checked objectively by using Theil's Coefficient and the Janus Quotient. Third, along with the business's management, the included independent variables are assessed to ascertain their intuitive logic – do they make sense? The final equation is then presented to the business on a spreadsheet PC programme for ease of use, and its use is fully explained to the entrepreneur or manager(s) (Simkin, 1990:36).

4.11.3 Implications of the SLAM Model

Originally the model was developed in order to predict turnovers for new store openings, but in order to produce such a model, the adopted approach attempts to ascertain the underlying reasons behind existing location's performance. The model then has the following key functions.

- It predicts expected turnover, the dependent variable, which forms an objective basis for a business's assessment of its existing portfolio and of new-store location choices.
- It identifies which market variables (factors) determine the success of a business's locations, and – of equal importance – which variables do not. Typically, each of these variables (factors) will match the management's own views, but significantly, one or two variables of importance will be new to the management's thinking.
- By examining the few outliers, under-performing stores are identified. This enables the rationalisation of the property portfolio, assuming that it is not simply a managerial fault. The model is, then, a diagnostic tool to assist in providing an explanation for poor performance (or over-performance). If one of the independent variables is not responsible – by being significantly above or below the business norm – the chances are that management is at fault and is therefore responsible for the under-performance. Where one of the independent variables is responsible, measures may be taken to overcome the problems being faced. Where the variables causing the problems are related to the location or physical characteristics of the business, then the only solution may be to relocate the business in question.
- The model examines a significant amount of competitor information and marketing data. It is possible to understand the impact of individual competitive brands, their store types and marketing mixes.
- When assessing new locations and business openings, it is possible for the model to rank site choices. Typically if an entrepreneur has decided to open a business in a particular town / city, four or five sites will be available. The model will examine all the available sites simultaneously and rank them in terms of expected turnover. The business's management can then use the model's findings as a basis for its decision-making in selecting the ideal site. The model thus leads to the determination of the most suitable site – in terms of expected turnover – for a new business or for relocation.

- Analyses of subgroup of branches within a business's portfolio can be carried out. Having developed a model pertinent to the business's chain of stores (or models for various types of stores within its portfolio), it is possible to identify subgroups of stores to be analysed separately and in more detail. For example, the most recent 20 openings could be evaluated against the business norm to check whether or not trading conditions have changed since the model's development (Simkin, 1990:37).

Where a company tended to concentrate geographically, it is possible to select branches on the edge or periphery of its trading territory and to develop a separate model based on data from those stores, where brand identity will be much lower than in the core of its trading area. This ascertains whether or not there are any changes in the included independent variables and their weighting for assessing stores outside the business's heartland. Similarly, in major conurbations, where it is possible that a business has a few outlets, but where customers will travel further, owing to their commuting habits, it is possible to develop a variation of the model as based on data for such locations. Again, this allows the level of accuracy and the scope for usage to be improved.

The SLAM approach produces statistically validated predictions of business turnover for existing site locations and for proposed new locations. As a marketing tool, the modeling process analyses which aspects of the business environment determines the success of a business outlets. Under-performing businesses are highlighted and their trading problems diagnosed, enabling the rationalisation of the property portfolio. Performance targets can be set for existing businesses and for new locations. The impact of competitors and individual competing brands, can clearly be identified in terms of store location analysis (Simkin, 1990:37).

In performing these tasks, the model manages to be simple to calibrate, to validate and to use, and does not deter management from using it on a daily basis. In this way, SLAM has manages to fill a void in the store location and performance theory, while becoming a useful tool in day-to-day management. The model is not a substitute for the manager's intuition, nor intended to be used in isolation. SLAM provides a more objective basis for the manager's decision-making, highlighting the most likely options

for new and relocations, presenting performance targets for all business outlets, and providing an objective basis for rationalisation of the property portfolio, where required.

4.12 SUMMARY

Nearness to markets is the single most important factor influencing the location of commercial facilities. For manufacturers, being near customers' ranks, with labour as one of the top two concerns, for retailers, nearness to customers is of paramount concern. Manufacturers routinely experience sales increases of 5 to 10%, or price cuts of similar magnitude to compensate for an offside location. Occasionally, the effects can be much larger. Being near markets, decreases the customer travel and delivery times, reducing customer warehousing needs. It increases interaction between producers and suppliers, and helps in matching products to market needs. The newest trend, therefore, is to locate the marketing function close to the market and the manufacturing side close to labour and raw materials.

Material inputs include aspects of weight loss, raw material perishability, and increased value added. One is alerted to changes in established paradigms, like the domestic raw material base of the Scandinavian paper industry, intensive applications of cooling and deep-freezing technology, and the subtle interlay of weight-loss, by-product credits, transportability, flexibility, and political pressure and risk in locating oil refineries.

Labour is usually of small concern in the location of retailing and any area with a sufficient market, will have an adequate supply of sales persons. The situation is very different for small manufacturers. They need strong labour forces, with the correct mix of needed skills. The direct labour costs and fringe benefits to the employer are higher for more highly skilled workers, but high productivity and product quality may more than compensate for them. Productivity is greater when there are few labour disputes. Some areas have better labour relations histories than have others, and these are preferred by businesses, all other things being equal.

Businesses prefer to locate in areas which they perceive to have good business climates. To some degree, perceptions of places and countries in these regards are influenced by governmental actions. High taxes, which are not counterbalanced by

services provided, environmental regulations and social legislation which make production excessively difficult, make some areas less desirable than others. Direct subsidies, controls and trade barriers can be powerful location factors. Novel in their locational effect are fluctuating exchange rates, leading to otherwise unusual decisions (Laulajainen & Stafford, 1995:60).

The different types of locations for SMME's are discussed in Chapter 5 before the residential-based location is empirically researched in this study.

CHAPTER 5

TYPES OF LOCATIONS FOR SMME'S THEORY

5.1 INTRODUCTION

As discussed in the previous chapter, one of the first steps in choosing a site, is to describe the ideal location, by developing two lists – required criteria and desirable criteria. *Required criteria* are those that must exist; if the location does not have all of the required criteria, it should not be considered as an option. The *desirable criteria*, however, are those that you would like to have, but which are not essential for the success of the business. As was seen in the previous sections, each industry has location factors that are unique; factors that are important for a retail site, are often irrelevant to a manufacturing firm. In addition, zoning laws are factors for any business and should be researched early in the site selection process. These laws are established by communities and local governments in order to control the type of businesses opened and to ensure, that the community development occurs in a well-planned manner. If a site is not zoned for the type of business the entrepreneur wishes to open, local government will determine if the property should be rezoned to the new classification. (All details regarding rezoning and local government regulations, are discussed in Chapter 8, as well as in the Appendixes.)

Because of these two aspects, it is of vital importance to look at the different types of locations for SMME's. Within each of the following categories, there might be more additional classifications and categories, but for the purpose of this study, the researcher will focus on the following main types of locations for SMME's.

- Central business district (CBD)
- Shopping centres/malls
- Office blocks
- Industrial parks

- Home-based businesses
- Telecommuting businesses
- Residential-based businesses.

5.2 CENTRAL BUSINESS DISTRICT (CBD)

The CBD is often the oldest area of a city, and decay and urban blight may have caused a retailing flight to the suburbs. Many CBD's have undergone a process of gentrification in which old buildings are torn down or restored, by way of new offices, housing developers and retailers (Levy & Weitz, 1992:323).

Mixed-use developments (MXD's) are shopping centres that have office towers, hotels, residential complexes, civic centres, and convention complexes on top or attached to the shopping area. MXD's are popular with businesses, because they bring additional customers to their stores (Levy & Weitz, 1992:324).

The CBD can be a viable site for many businesses. Proponents of the central place theory would argue, that the CBD has potential, due to its size – a cluster of business establishments draws people to the area. People must also go to the area for work. It also has its drawbacks. Businesses are less attracted to CBD's, because higher security is required, shoplifting can be more common and parking often is a problem. Since many CBD's have not been fully renovated, high crime rates and urban decay can discourage shoppers from the suburbs. Shopping in the evenings and at weekends, can be particularly slow in many CBD's (Levy & Weitz, 1992:325).

5.3 SHOPPING CENTRES/MALLS

From the 1950's through the 1980's, business declined in many CBD's, while suburban shopping centres grew as the population shifted to the suburbs. The centres take two basic forms. Smaller centres, known as strip or ribbon centres, comprise several adjacent stores located along a major street or highway. Larger centres and speciality centres take the form of shopping malls, which are generally more planned than are

strip centres, have more pedestrian activity, and can be either open-aired or enclosed. Shopping centres contain anchor stores designed to bring customers into the centre. Anchors for smaller centres are usually grocery or discount stores, such as Spar and 7-Eleven, whereas department stores usually anchor the larger centres (Levy & Weitz, 1992:326).

Shoppers have demanded the convenience of shopping centers. Life in the suburbs has created a need for stores located within a short drive from home. Large shopping centers provide an assortment of merchandise that in many cases exceeds that of the CBD. Binding many stores under one roof, creates a synergy that attracts more customers than if the stores were located in separate locations. Although planned shopping centers are an excellent site option for most businesses, they have some disadvantages. First, rents in malls are relatively higher than those of some freestanding and CBD sites. As a result, retailers that require large stores may seek other options. Second, shopping center locations often limit retailers' flexibility. Shopping center management may require uniform hours and may specify the size and type of exterior design. Finally, competition within some shopping centers can be intense. It may be difficult for small specialty stores to compete directly with larger department stores (Levy & Weitz, 1992:326). The following types of shopping centres exist.

- *Convenience centre.* This includes a convenience market, such as a 7-Eleven store and a liquor store. The trade area is small. Convenience centres are found in suburban locations and in densely populated high-rise apartment areas.
- *Neighbour centres.* It ranges in size from 8 000 to 30 000 square metres and includes a supermarket and frequently a drugstore, home improvement centre, or variety store. The smaller centres often include apparel, shoe, camera stores and other shopping goods stores.
- *Community centres.* These are comprised of a discount store or a soft-line department store as an anchor. Also included, are a supermarket, a super-drugs store, a home centre, and 15 000 to 20 000 square metres of other convenience and shopping goods stores.

- *Power centres.* Open-air centres with three or more anchors and other stores that use price promotion as primary marketing strategy.
- *Regional and super-regional centres.* Include up to three department stores. The other tenants are more likely to be shopping or speciality stores rather than convenience stores. Super-regional centres are similar, but have at least four department stores.
- *Speciality centres.* There are two types of speciality centres: the promotional or discount-anchored and the fashion-oriented centre. The discount-anchored centre contains one or more discount stores. The fashion-oriented centre usually contains a high quality department store, as well as small boutiques.
- *Off-price and outlet centres.* Specialise in off-price retailers. Outlet centres develop in response to off-price centres and specialise in manufacturer's outlet retailer-owned, and operated by a manufacturer.
- *Historical theme centres.* Located in a place of historical interest, whereas theme centres try to replicate a historical place. These centres typically contain tenants similar to speciality centres, except that there is no large speciality store or department store as anchors (Levy & Weitz, 1992:335).

5.4 OFFICE BLOCKS

Office blocks are primarily market-orientated, in the sense that they are occupied by specific businesses. These are typically consultants, governmental employees, lawyers and other professionals located in office blocks. The building usually belongs to an individual company (like Anglo, Liberty, etc.) or pension fund that rents the office space to clients. It is usually the cheapest location, but has many disadvantages, of which no retailing facilities and infrastructure and the fact that office blocks are still usually found in CBD areas, are the two most important ones. Visibility and access are, therefore, important, but maybe not as high on the priority list as in the case of retail and other services.

During 1998 to 1999, there was a substantial decline in new office developments, meaning that sought-after office locations became scarcer. This also meant, that because of the high demand and low supply in good locations, rent increased. It is estimated, that office rent in prime locations will in the near future rise to R150 per square meter per month (Muller, 1999:44).

South Africa was until recently, known as one of the cheapest countries for office space, but there has been a sharp increase in leasing prices in suburbs like Sandton in northern Johannesburg. Many suburbs' office space is now more expensive than those in countries like Canada and South East Asia. Because of South Africa's poor exchange rate, many foreign investors, therefore, like the idea of renting office space in South Africa because of the money-saving aspect (Muller, 1999:38).

It must be stated, that not many SMME's are locating to office blocks, due to the nature of their business, but purely out of cost considerations or ignorance.

5.5 INDUSTRIAL PARKS

A site analysis for a manufacturing firm is just as important as for a retail firm, but the criteria is very different. Manufacturing firms usually require a large labour force; labour factors like the level of union activity, the average wage rates and the "work ethic" of the residents (absentee and turnover rates) are important criteria.

Manufacturers also often need to be located near their source of raw materials, because transportation costs of these materials are very high. They use a high level of utilities and, therefore, access to a variety of transportation systems, including rail lines, airlines, sea/barge traffic and trucking.

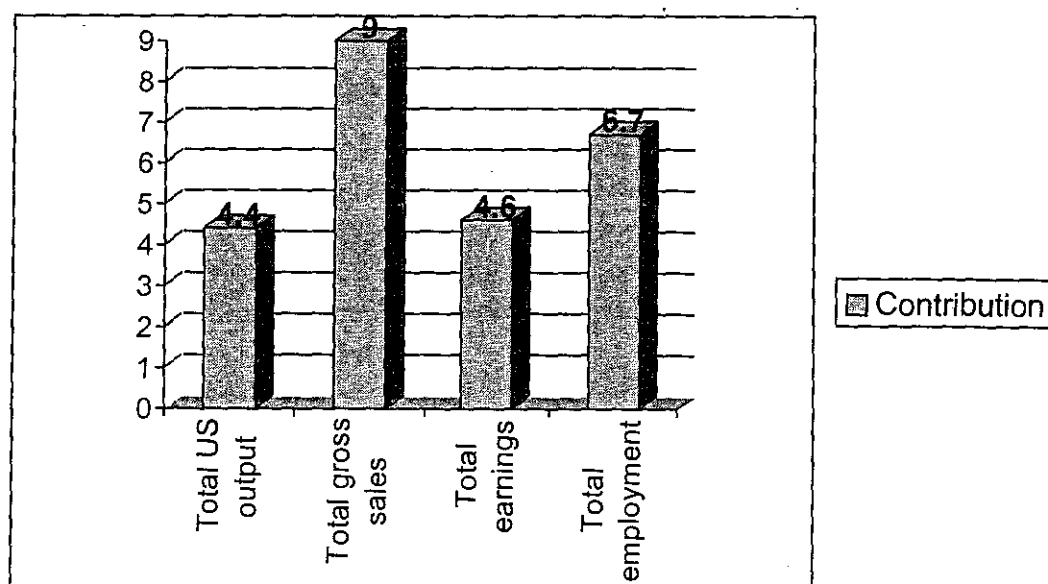
Furthermore, local taxes for manufacturing firms vary substantially among communities, and therefore, should investigate the types of taxes that are assessed and the rates for each. Communities try to attract manufacturers that employ many people and offer tax abatements or reduction as an incentive to locate in the community. They also have to check environmental regulations, since these laws may prohibit certain types of manufacturers from locating in certain areas (Lambing & Kuehl, 1997:169).

5.6 HOME-BASED BUSINESS

According to the department of city planning (Verchuren, 1998) at the Pretoria City Council, a home-based business is defined as the practise of an activity at a dwelling-place where the residents are living with the aim of deriving an income therefrom. The home-based industry is an institution that has proliferated in recent years and the growth over the last four years in South Africa has been staggering. However, compared to countries like the Unites States of America and Britain, the home-based industry in South Africa is still minute and should continue to grow rapidly over the next few years.

Research conducted in the United States in 1994 showed, that home-based businesses formed a significant component of the American economy. The study found that home-based businesses contributed 4,4% of the total output produced by all American businesses (Figure 5.1). If indirect contributions are added, they contributed 9% of gross sales, 4,6% of total earnings and 6,7% of total employment (Mehta, 1994:19).

Figure 5.1 Contribution of home-based businesses as a percent of all US businesses



Source: Mehta, 1994:19

According to Lambing & Kuehl (1997:52), the increase in home-based businesses has occurred for several reasons. First, the electronic revolution, with the development of computers and fax machines, has made working at home possible. Second, massive layoffs at corporations have resulted in many people seeking financial security through self-employment. Lastly, the increasing demand for service businesses has made home-based businesses possible, since location is not important if the entrepreneur goes to the customer's location (in the United States 70% of home-based businesses are in the service industry).

Other important factors include economic advantages, travelling expenses, time and changing lifestyles (the desire to combine a career and a family).

Many developments in the economy and technology have opened the door on a broad array of new home-based occupations. Add financial rewards, tax benefits and more, and it's plain to see, that it pays to work from home. Kishel & Kishel (1991:1) mention the following benefits of a home-based business.

- **Personal freedom.** The ability to gain control over one's life, is perhaps the most exiting aspect of a home-based business. Rather than bending to the demands of the work environment, individuals can mould their environments so as to meet their own needs.
- **Financial benefits.** The financial benefits of working at home are equally attractive. Instead of waiting for top management to grant a raise or a promotion, the amount of money one can earn, is directly related to one's own performance.
- **Tax savings.** Using your home as a place of business, offers a number of tax advantages. For starters, it allows you for deduction of a part of the operating and depreciation expenses on a home. This means, that a percentage of the rent or mortgage payment, depreciation, property taxes, insurance, utilities, and expenses for household maintenance, repairs or improvements, are deductible.
- **Family togetherness.** In many instances, home-based businesses are strengthening family relationships by enabling the whole family to get involved.

Instead of going in separate directions, more and more husbands and wives are pooling their energies and working towards a common goal. At the same time, children have an opportunity to see what their parents do for a living, and to learn about business firsthand.

- **Reduced stress.** Electing to work from home, can go a long way toward reducing stress, particularly the stress that comes from trying to juggle the demands of your work life with those of your private life. Things like office politics and arguments among co-workers (two well-known causes of stress) can be eliminated by working from home.
- **Job enrichment.** One of the benefits most frequently mentioned regarding home-based businesses, is job enrichment. Unlike the typical worker, who is boxed into one job and given a label identifying him or her as a bookkeeper, plumber, attorney, manager or secretary, the home-based business person is free to learn and perform a variety of work-related tasks. Working from home allows one to devote the entire day to one activity or to a succession of activities. Varying activities and working at a pace that is natural for a person, helps to ensure that one will not get bored. Instead of going through the motions of performing a task, there is a feeling of involvement. Since everything one does, is directed at making one's business a success, one will experience a sense of excitement.
- **Increased productivity.** Home-based entrepreneurs generally agree, that working from home helps them to be more productive. Part of the reason for this, is that there is simply more time available. Hours that would normally be spent commuting, can be used to run the business instead. Another reason that cannot be overlooked, is the increased level of enthusiasm on the part of home-based workers. Many are so caught up in what they are doing, that it is actually hard for them to stop.
- **Competitive advantage.** Working from home, can enable one to be more competitive, not just in the prices one charges, but also in the quality service one offers. One can use the money saved on rent, for example to increase overall profitability, or one could pass it on to customers in the form of lower prices. Competitors restricted by higher overhead costs, have no such options. Having

one's business at home, also makes it easier to provide customers with personal service.

Sheedy (1994:2) mentions the following disadvantages of home-based businesses.

- **Monetary risk.** Sooner or later, cash has to go on the line and you will have to risk capital. This probably is the major reason why many people will not start their own home-based business.
- **Pressure to perform.** The flip-side of being one's own boss, is that one is on one's own. This responsibility can weigh heavy if one routinely depends on others to help one out.
- **Expert in variety of tasks.** Many tasks must be accomplished in a home-based business – sales, record-keeping, inventory, finance and management, to name but a few. To be successful, one should develop competence in each of these areas. Running a successful business, is a continuous learning experience.
- **Difficult to leave work behind.** Many people who work at home, find it impossible to turn off the lights on their business. The time they gain from not commuting to work, can be easily forfeited by staying too long at their desks.
- **Irregular income.** Business has it ups and downs. Unfortunately the home-based business's income, can follow the same pattern. In the early stages particularly, sacrifices like holidays, company benefits and a fixed income would have to be made.
- **Loneliness and isolation.** The feeling of being "cut-off" can be a real stumbling block if one does not take steps to handle it. Planning an active network of business associates, such feelings can be beaten. Most home entrepreneurs do have to take action in order to overcome the sense of isolation.
- **Motivation difficulties.** It can be very easy to linger over morning coffee, potter in the garden, visiting the driving range. Lack of motivation can starve the fledgling

enterprise. Motivation is an inner resource that relies on a strong desire to meet your goals.

- **Business may stay after hours.** Customers burden some home-business people 24 hours a day. Many customers believe, that if you are working from home, you are available around the clock. They think nothing of calling well into the night. This problem can be handled, but it will take some discipline and planning on the entrepreneur's part.

5.7 TELECOMMUTING

It is generally agreed that telecommuting and home-based businesses are different "animals". Only people employed in certain occupations can telecommute, for example, most manufacturing or maintenance workers cannot. Telecommuting typically involves a narrow range of information-related, computer-supported applications. With some exceptions, the employee's needs generally are defined by the technological dependence of their work. The requirements are virtually the same for a programmer, a customer service representative, an engineer, a technical writer or any other information worker. Telecommuting is a market with relatively clear needs and readily identifiable customers (Kocher, 1993).

It is quite clear, that the term "telecommuting" is not clearly defined and is often used to encompass a number of different styles of work. Gray *et al.*, (1995) define telecommuting as " ... a flexible way of working which covers a wide range of work activities, all of which entail working remotely from an employer, or from a traditional place of work, for a significant proportion of work time" (Armstrong and Hobbs, 1998).

Telecommuters are also seen as corporate employees or contractors who, in lieu of commuting to a worksite, perform company tasks from their homes in company time. A true telecommuter, by strict definition, uses electronic means to transfer work between home and office. Some experts apply the term more broadly to cover any worker who uses the home as an extension of the employer's work in the employer's time (Bacon & McKee, 1989).

Furthermore telecommuting is also defined as the ability of workers to either work from home or to only drive a few minutes and reach a complex in their immediate neighbourhood where, through advanced communication and computing support provided by the "landlord" of the complex, they can access their corporate computing resources and undertake work (Eldib & Minoli, 1995).

Preliminary demographic and incidence level surveys conducted with Yankel Partners, identified approximately 15 million full-time home-based businesses. Part-time self-employed people account for another 7 million households. The survey also found, that 8 million telecommuters work at home one or more days per week during business hours, while 24 million people bring work home at least twice a month.

There are also 11 million moonlighters – people who are employed fulltime outside the home in more than one job (Kocher, 1993). More specifically, home-based workers fall into the following four categories.

- The over-timers
- Telecommuters
- Moonlighters
- Home entrepreneurs.

For years, senior managers belonged to the first group, lugging work home on evenings and weekends. Now many of them have entered the second group, doing their work at home during regular office hours and relaying it back to office by fax and modem (McCullough, 1992).

The driving forces that have motivated telecommuting, are likely now to be halted. Vehicular traffic congestion will continue to increase, respect for the environment will grow and companies will need to attract higher quality staff, improve customer service and reduce costs. Gray *et al.*, (1995) predicts 35 million telecommuters in the USA and 10 million in the UK in the year 2010. However, rather than a sudden change, it is more likely that there will be a gradual, evolutionary change in working practices as a long-

term consequence of the information technology revolution. In all probability, telecommuting will increasingly be absorbed into the mainstream of normal working practice. The current distinctions between home working, tele-centre working and office working will begin to fade. More flexible, location-independent working practices will emerge. It will become accepted practice for workers to spend part of their time working outside of the traditional office.

Cost of time-savings can be achieved through telecommuting, by reducing the need for centrally maintained offices in expensive locations and reducing time-wasting, with less travelling. Gray *et al.*, (1995) and Heap (1995), find telecommuters to be more productive than office-bound staff, who have to travel to work and tend to suffer a higher level of stress. Telecommuting is generally regarded as a "green" activity, primarily because of the reduction in travel, consequent fuel savings and the lessening of pressure on congested city centres and overstretched public transport.

The growing popularity of telecommuting can also be attributed to the fact that, by all accounts, it works. By using technology to move information, rather than by using people, employers can cut office expenses, save energy and respond to their employees' changing lifestyle needs. However, the most beneficial reason for implementing a telecommuting program, is increased employee productivity by means of saving and utilising time much more efficiently. The only problem of this time-efficient tool, is that not many organisations realise the immense influence it could have on their business.

5.8 RESIDENTIAL-BASED BUSINESS

According to Standard Bank's Small and Medium Enterprises Department (2000), a residential-based business is a residential property in a residential area converted to commercial use and purpose-built units whether freehold or sectional title. Converted residential properties will need to be in an area zoned for commercial use or have consent-use status granted by the municipality (Standard Bank, 2000).

The most important characteristics regarding the nature and extent of home-offices, are as follows (Van den Berg, 1983).

- In contrast to a home-based business, no people domicile in a residential-based business. It is used strictly just for business purposes.
- Residential-based businesses seem to be found mainly in higher socio-economic status class residential areas (in contrast to home-based businesses), close to the CBD and tend to be more prevalent in the older residential area. Public-orientated residential-based enterprises, that is, residential businesses, which provide a direct service to the public, e.g. those of veterinary surgeons, dentists, medical doctors and lawyers, tend to be spread throughout residential areas, whilst non-public orientated residential businesses, which do not provide a direct service to the public, e.g. those of engineers, townplanners, architects and land-surveyors, tend to be grouped close to the CBD.
- Residential-based businesses seem to originate mainly in business areas, can show an increase in numbers and in most cases, regard their occupation of residential offices to be of a permanent nature.
- The condition of buildings occupied by residential offices, appears to be generally better than that of their environment (Van den Berg, 1983).

Barnard (1997:18) mentions, that more and more enterprises are moving from the CBD areas and shopping centres to residential properties in upmarket suburbs. This also applies to new businesses. Most of these businesses are service industries and organisations that provide a personal service or product to the public. Therefore, there is no high influx from clients in these areas. The main reasons for these moves, are attributed to bad economical conditions, increased urban violence, vandalism and overall higher costs.

Some advantages of residential-based businesses are the following (Barnard, 1997:18).

- Purchasing of the property as an asset.
- Budgeted rent premiums being paid on the property (in the case where the property is purchased).

- Bond premiums are usually lower than rent premiums because of the bond period.
- Saving on current expenditures, for example rent, electricity, etc.
- Probability of renting a part of the property to other enterprises (potential income).
- Probability of developing an exclusive image, identity and visibility.
- Layout of the business is not restricted to space or change.
- Parking for customers and employees are more comfortable and available.
- Expansion probabilities are less restricted.
- The property (asset), as part of the business, increases the resale value.

Residential-based businesses have become a visible feature on some main road arteries into and out of Pretoria, the administrative capital of South Africa. Previous residential-zoned properties are being used to such an extent for business purposes, that certain main routes into the city centre have now virtually lost its residential character. This phenomenon is happening all over the world, especially in the major cities and towns (Barnard, 1997:18).

Even though home-based businesses is not new to South Africa – some 1,8 million people run some form of business from home – the purchase of residential property and the rezoning for business use in some specific areas, seem to be a new phenomenon. Because of this new important trend in South Africa's small business market, it is important to investigate this phenomenon in more depth and then not only to evaluate, but also to develop a framework for entrepreneurs on how to start such a business with a residential-based location and to manage it successfully. The rest of this study, therefore, empirically investigates this new phenomenon, with the results or findings, recommendations and framework to follow.

5.9 CONCLUSION

Chapter 4 investigates literature on the location-decision for small, medium and micro enterprises (SMME's), with the purpose of researching the different modules and methods of new locations and relocations. All the important theories on this specific topic have been discussed and also how the search for the best location is being done.

All of the different location factors that play a role in this important decision, have been discussed, as well as how they can be evaluated, by way of a few practical calculations.

In Chapter 5 all the different types of locations for SMME's are discussed in detail, namely, CBD (Central Business Development), shopping centres (malls), office blocks, factories, home-based businesses, telecommuting and residential-based businesses. The study particularly compares the different types of locations and emphasises the importance of the latest trend in location, namely the residential-based business.

Preliminary interviews with entrepreneurs and small business owners of these residential-based businesses, would indicate that it is an alternative location to especially shopping centres and office blocks. It would appear, that the classic "location" has become an impossible dream for SMME's in the "mom-and-pop store" group. They are often harassed by landlords and/or cannot afford the rentals charged or cannot comply with certain aspects of the lease agreement.

The exploratory research into this phenomenon of residential-based businesses that follows will, therefore, clarify all the problems as well as the advantages of this location-decision, with the main purpose of developing a framework for residential-based businesses as alternative location-decisions for SMME's. (The rezoning laws and other rules and regulations of the local authorities will also be included in this framework.) In Chapter 6 the research methodology is discussed.

CHAPTER 6

RESEARCH METHODOLOGY

6.1 INTRODUCTION

The term “methodology” refers (Collins Dictionary, 1995), to “ ... the system of methods and principles used in a particular discipline”, which in the case of this study, is the methods and principles used in the research. The term “methodology” is also closely related to the term “epistemology”, which comes from the Greek word “episteme”, which means knowledge and also constitutes the philosophy of how we come to know.

While methodology is also concerned with how we come to know, it is much more practical in nature and is focused on the specific ways or the methods that we can use to understand our world better. Epistemology and methodology are intimately related: the former involves the philosophy of how we come to know the world and the latter involves the practice (Trochim, 1997).

This chapter aims to provide an insight into the practical ways and methods employed in gathering the information for the empirical part of this study. The universe and sample frame will be discussed, as well as the sample method and size. Next, the method of data collection and questionnaire design is described. The last part of the chapter concerns the data processing, analysis and evaluation of results.

6.2 DEFINITION OF PROBLEM, OBJECTIVES AND DATA REQUIRED

6.2.1 Problem definition

The definition of the problem to be researched is, according to the American Marketing Association (AMA), the most important step in a research project (Martins, *et al.*, 1996:82) and also one of the most difficult (and least discussed) aspects of research (Trochim, 1997).

The problem of this study was clearly defined in Chapter 1 and in short, comes down to the location-decision that SMME's have to make in order to optimise their future business survival. This location-decision has several different factors as well as choices but the residential-based option as location, has not really been researched in depth. There are specific advantages and disadvantages of this location-decision and the purpose of this study then, is to evaluate and investigate the concept of residential-based location as an alternative location-decision and, therefore, to develop a framework for future entrepreneurs to consider.

6.2.2 Objectives of the study

The primary objectives of this study are:

- An investigation of residential-based businesses as an alternative for small and medium size enterprises.

The secondary objectives of this study are the following.

- The effectiveness of residential-based businesses as location for SMME's.
- What kind of SMME are likely to make a success of a residential-based location.
- The influence and problems perceived from the local authority regarding a residential-based business.
- The growth of residential-based businesses.

6.2.3 Data required

- ***The universe***

The first step in the sampling process, is defining the universe (Sudman & Blair, 1998:334). The universe or population is the total group to be (Blankenship & Breen, 1993:1267) and is the aggregate of all the elements (Martins *et al.*, 1996:251).

According to Sudman & Blair (1998:334), the first step in defining the population, is to define the population units. Trochim (1997) notes, that it is very important to define the

unit of analysis, which refers to the major entity that to be analysed the study. This analysis determines what the unit is and not the sample drawn.

In the case of this study, the population unit is comprised of individuals (entrepreneurs), while the unit of analysis, is the specific SMME being investigated.

The next step in defining the population, is to determine the population boundaries (Sudman & Blair, 1998:335), which, in the case of this study, will be small, medium and micro enterprises running businesses from a residential property.

- ***The sample frame***

Once the population is defined, the next step is to obtain a frame of the population (Sudman & Blair, 1998:338). This is " ... a record of all the sample units available for selection at a given stage of the sampling process" (Martins *et al.*, 1996:252). The availability of a sampling frame, is one of the most critical factors in determining a sampling design. If such a frame is available, the task of sample selection is significantly reduced. If no frame is available, researchers will essentially need to construct their own frames. This is a difficult, costly, and time-consuming task (Sudman & Blair, 1998:338).

The sample frame used in this study, is the SMME's operating on residential properties in the Pretoria Metropolitan area, especially on the main arteries, namely Schoeman, Pretorius, Duncan, Charles, Soutpansberg, Zambesi and other streets.

Sudman & Blair (1998:338) identified the following three ways in which the sample frame may differ from the population.

- The frame may contain ineligible or elements that are not part of the population.
- The frame may contain duplicate listings.
- The frame may omit units of the population, which is by far the most serious problem.

Sudman & Blair (1998:338) provides three solutions to the problem of omission. Firstly, one could ignore the omissions from the frame and accept the possible biases that

result. Secondly, one could discard the frame and use a different frame or generate a new frame. Thirdly, one could use the frame, but combine it with another frame.

It is possible that biases could exist between the opinions of members of the sample frame and the population. It is, however, assumed, that the opinions of the sample frame used, represent the opinions of informed entrepreneurs/managers/owners of residential-based businesses in South Africa. It was thus decided to accept the possible biases and to make use of this particular sample frame.

- ***Sampling method and sample size***

Due to the smaller population of this study, it was decided, that personal interviews would be used to do the sampling. Professional fieldworkers were appointed and over a period of two months 200 residential-based businesses were questioned, with a resultant success rate of 144 questionnaires, which accounts for a 72% success rate.

There are real advantages and clear limitations to personal interviewing, of which the greatest value lies in the depth of information and detail that can be secured. It is, on the other hand, very costly in both monetary and time terms. But for the purpose of information gathering, the personal interview is a very effective sampling tool (Cooper & Schindler, 1998:291).

Mail surveys were not conducted for obvious reasons, as Dillon, Madden & Firtle (1987) promptly note, that mail surveys must be considered as non-probability or convenience samples, due to their typical low response rates. Lockhart & Russo (1994:144) suggest that non-respondents to mail surveys, could feel that they do not know enough about the topic of the survey. In some instances, this non-response bias is good, because subjects disqualify themselves, based on the relevance of the topic of the survey to them, while in other instances this could result in surveys that are not representative of the sample frame.

6.2.4 Method of data collection

There is no simple answer to which of the available methods of data collection the researcher should use when collecting primary data. It all depends on the purposes and nature of its use (Blakenship & Breen, 1993:122).

It was then decided to develop a questionnaire with structured, as well as unstructured questions, which would be completed by either the correspondent or the fieldworker, depending on the correspondent's choice.

- ***Questionnaire design***

The first step in the design of the questionnaire, was to develop a preliminary questionnaire where all the questions were open-ended, unstructured and developed from the initial research problem. This was done in order to ensure that the research problem did really exist and that the study was to contribute to the field of management science. This preliminary questionnaire was distributed among only 20 respondents of the same sample and evaluated against the objectives set out for the study.

The second step, was to list the aspects of information obtained from the preliminary questionnaires and also those derived from the problem definition and research objectives and subsequently to develop the final questionnaire.

- ***Rating scales***

Scale types could be classified into the following four categories (Sudman & Blair, 1998:448).

- *Ratio scale* variables, which have properties of order among scale points, equal distances among all adjacent scale points, and an absolute zero.
- *Interval scale* variables do not have the property of an absolute zero, but have the properties of order among scale points and equal distances among scale points.
- *Ordinal scale* variables have only the property of order among scale points.
- *Nominal scales* are simply names for the categories and do not have the property or order among them.

The scale types used in a survey after the applicability of the various summary measures, are presented in Table 6.1.

Table 6.1 Scale types

Scale type	Mathematical properties	Applicable summary statistics
Nominal	None	Mode
Ordinal	Order	Median
Interval	Order, equal intervals	All (mean, median, mode variance, standard deviation, interquartile range)
Ratio	Order, equal intervals, absolute zero	All

Source: Adapted from Sudman & Blair, 1998:460

A standard five-point Likert-Scale, which is often referred to as a summated-ratings scale (Churchill, 1992:405), was used i.r.o. most of the questions so as to ensure consistency and ease of completion. A nominal scale was used for the questions on demographics, which were in the form of multiple choice questions, with single answers.

Open-ended (unstructured) questions were also used to investigate the correspondents personal views in regards to aspects like advantages, disadvantages and suggestions.

- ***Testing of the questionnaire***

According to Sudman & Blair (1998:300), there is always a chance that some questions could cause problems and questionnaire testing is needed to identify and eliminate these problems.

The questionnaire was tested, by distributing a copy of the questionnaire to 10 respondents in different fields, ranging from academics to entrepreneurs. Interviews were conducted personally afterwards, with the respondents to determine the underlying weaknesses of the questioning and how to go about correcting them. The questionnaire was adapted after the pilot phase and some statements, which proved to be unclear, were deleted.

- ***Data processing, basic analysis and evaluation of results***

The responses were directly captured from the questionnaire by using software packages at the Department of Statistics at the University of Pretoria. Some basic calculations were made in order to check the reliability of the data. Finally, the data

were imported into the statistical software programme, where the final analysis and cross-tabulations were made.

- **Response rate**

A response rate of 72% (144 respondents from a total of 200 sent out) was realised.

- **Editing and coding**

According to Martins *et al.*, (1996:295) " ... editing entails a thorough and critical examination of a completed questionnaire in terms of compliance with the criteria for collecting meaningful data and in order to deal with questionnaires not duly completed". All questionnaires, once received, were edited and checked for completeness and accuracy. Although it is quite legitimate for an editor to complete a missing answer (Martins *et al.*, 1996:298), in this case, however, incomplete answers were not completed by the editor, as it could bias the responses. Unsatisfactory sections or parts of some questionnaires were discarded, but in the case of a less than 70% completeness of a particular questionnaire, the questionnaire was discarded in total.

Coding refers to the process whereby codes are assigned to the answers of respondents (Martins *et al.*, 1996:299). A coding frame was drawn up, where every answer was coded in order to simplify the capturing of the data.

- **Data cleaning**

According to Sudman & Blair (1998:428), the finished data file usually contains some coding and/or data errors that should be cleaned.

The first step is to calculate out-of-range values for every variable (Sudman & Blair, 1998:429). A wide-code check was done, by calculating the minimum and maximum values of each of the questions. Codes not in the data set, were then identified and checked with the original questionnaire. Any wildcodes were then changed according to the original response on the questionnaire. The averages for all the questions in the questionnaire were also calculated, which highlighted out-of-range values.

- **Data transformation**

Once the data have been entered it is almost always necessary to transform the raw data into variables that are usable in the analyses (Trochim, 1997). The following transformations were performed in this study.

- Reversal items were used in some instances to help reduce the possibility of a response set. In order to get all scores for scale items to be in the same direction where high scores mean the same thing and low scores mean the same thing, the ratings were reversed for these specific items.
- Scale totals: All scales were transformed from a seven-point scale of a standardised 100-index.

6.3 ANALYSIS

6.3.1 Tables

The data was first analysed in tabular format. A standard set of tables was produced, which included the average response for each item expressed in terms of the standardised 100-index (%). The average refers to the mean score for the item expressed in terms of the standardised 100-index. In some instances, the standard deviation was calculated in order to measure variation, and is calculated as follows.

$$\sigma = [\sum(x_i - \mu)^2 / N]^{1/2}$$

where

μ = the population mean; and

N = the population size.

6.3.2 Validity and reliability

According to Martins *et al.*, (1996:26), researchers often neglect to point out possible shortcomings and pitfalls in research results. Reliability and validity are prerequisites for research data to be useful and it is, therefore, important to be able to proof reliability and validity.

- **Validity**

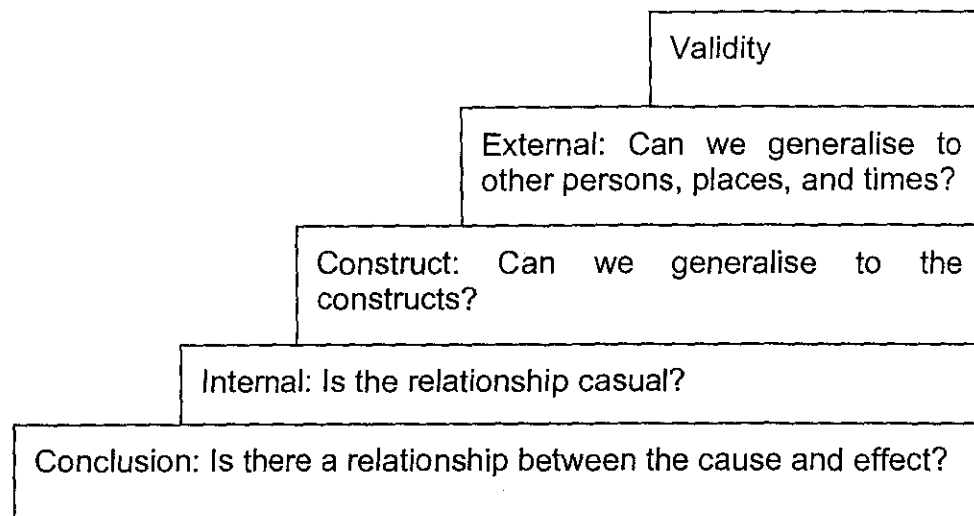
It seems that the term "validity" is a source of disagreement amongst authors. According Martins *et al.*, (1996:26), validity applies to measuring instruments, and Bagozzi (1994:18) is of the opinion, that a measure is valid to the extent that it measures what it is intended to measure, Trochim (1997) notes, that it is technically incorrect. According to him, measures, samples and designs do not have validity. Only propositions can be said to be valid. He states that technically " ... *we should say that a measure tends to valid conclusions or that a sample enables valid inferences, and so on. It is a proposition, inference or conclusion that can have validity.*"

Putman (1962:379) defines validity as a law-cluster concept i.e. " ... *a group of interrelated ideas whose totality captures the essence of the phenomenon under consideration*" (Bagozzi, 1994:18).

According to Trochim (1997), validity can be subdivided into the following four types, which build on one another.

- *Conclusion validity.* Is there a relationship in the particular study between the two variables?
- *Internal validity.* Assuming that there is a relationship in the study, is the relationship a casual one?
- *Construct validity.* Assuming that there is a casual relationship in the study, we can claim that the programme reflected well our construct of the programme and that our measure reflected well our idea of the construct of the measure.
- *External validity.* Assuming that there is a casual relationship in this study between the constructs of the cause and the effect, can we generalize this effect to other persons, places or times?

Figure 6.1 The cumulative questions of validity



Source: Adapted from Trochim, 1997

The theory of validity, and the many lists of specific threats, provides a useful scheme for assessing the quality of research conclusions. The theory is general in scope and applicable, well-articulated, with philosophical suppositions, and virtually impossible to explain adequately in a few minutes. As a framework for judging the quality of evaluations, it is indispensable and well worth understanding (Trochim, 1997).

- **Reliability**

According to Trochim (1997), reliability relates to the quality of measurement and refers to the degree of agreement between independent attempts to measure the same theoretical concept (Bagozzi, 1994:18). It thus relates to the consistency of a method in its ability to yield reproducible results (Martins *et al.*, 1996:26).

Bagozzi (1994:18) distinguishes between two types of reliability. Internal consistency is obtained when two or more measures of the same theoretical concept are obtained at the same point in time and the agreement between the measures has been ascertained. Test-retest reliability addresses the consistency of repeated measures of the same theoretical concept over time and can be estimated by the correlations between the measures across time (Bagozzi, 1994:18). Trochim (1997) suggests four general classes of reliability estimates, each of which estimates reliability in a different way.

Apart from the mentioned internal consistency and test-retest reliability, he adds inter-rater or inter-observer reliability and parallel-forms reliability.

- *Inter-rater or inter-observer reliability* is used to assess the degree to which different observers give consistency estimates of the same phenomenon, while parallel-forms reliability refers to the assessment of the consistency of the results of two tests constructed in the same way from the same content domain.
- *Inter-rater or inter-observer reliability.* There are two major ways to actually estimate inter-rater reliability (Trochim, 1997). Firstly, if the measurement consists of categories – the raters are checking off which category each observation falls in – one can calculate the percentage of agreement between the raters. The other major way to estimate inter-rater reliability, is appropriate when the measure is a continuous one in which case one could calculate the correlation between the ratings of the two observers.
- *Test-retest reliability.* Although the correlation between the two observations will depend in part by how much time elapses between the two measurement occasions, one could imagine measuring the two measures at the same time, while the error could be cut down considerably. This could be achieved, according to Trochim (1997), by -
 - measuring the instrument twice for multiple persons;
 - computing the correlation between the two measures; and
 - assuming there is no change in the underlying trait between the first and second time.
- *Parallel-forms reliability.* This could be measured by administering both forms to the same people and getting the correlations between the two forms.
- *Internal consistency reliability.* One of the most common used measures of reliability, is the Cronbach Alpha coefficient (Bagozzi, 1994:18), which provides a measure of internal consistency.

6.3.2.1 Cronbach's Alpha

According to Statsoft Inc. (1997), if several subjects responded to specific items, the variance for each item could be calculated, as well as the variance for the sum scale. The variance of the sum scale will be smaller than the sum of the item variance if the items measured the same variability between subjects, that is, if they measure some true score. Technically, the variance of the sum of two items is equal to the sum of the two variances minus (two times) the covariance, that is, the amount of true score variance common to the two items.

The proportion of true score variance captured by the items, could be estimated by comparing the sum of items variances with the variance of the sum scale. The formula for calculating Cronbach's Alpha coefficient (α) is the following

$$\alpha = (k/l - 1) * [1 - \sum(s_i^2) / s_{sum}^2]$$

where:

s_i^2 = the variance for the k individual items; and

s_{sum}^2 = the variance for the sum of all items.

If there is no true score, but only error in the items (which is esoteric and unique, and, therefore, uncorrelated across subjects), then the variance of the sum will be the same as the sum of variance of the individual items.

Therefore, coefficient Alpha will be equal to zero. If all items are perfectly reliable and measure the same thing (true score), then coefficient Alpha is equal to 1. (Specifically, $1 - \sum(s_i^2) / s_{sum}^2$ will become equal TO $(K-1)/k$; if we multiply this by $k/(k-1)$ we obtain 1.)

Users of Cronbach's Alpha have often wondered whether the reliability they have obtained, is good. It is suggested, that a reliable level of .70 will be enough on predictor tests or hypothesized measures of a construct (Nunnally, 1978:245; Boulding, Staelin, Zeithaml & Kaita, 1993, 1993). It is, however, acknowledged that a minimum .90 should be tolerated in those applied settings where important decisions are made. It is thus suggested, that a minimum of .70 for exploratory work and a standard .90 for advanced practice should be applied (Nunnally, 1978:246).

Cronbach's Alpha, when computed for binary terms, is identical to the so-called Kuder-Richardson-20 formula of reliability coefficient computed in this manner and is also referred to as the internal-consistency reliability (Statsoft In. 1997).

The results of the Cronbach Alpha analysis are provided in the researched findings in Chapter 7.

6.4 FACTOR ANALYSIS

Thurstone (1931) first introduced the term "factor analysis". It is a generic name for a group of multivariate statistical methods whose primary purpose is to define the underlying structure of a set of variables and to reduce a set of variables, measures or items to a smaller set of common factors (Hair, Anderson, Tatham & Black, 1995:366). It examines the relationship of each of a large series of variables with every other one, to determine which are highly correlated with other ones. The process ends with a reduced number of packages of variables (Blankenship & Breen, 1993:266).

Factor analysis calculates a series of factors as a weighted combination of the variables being analysed. These combinations take the following form.

$$F = w_1x_1 + w_2x_2 \dots + w_kx_k$$

where F is the factor x_1 through x_k are the variables being analysed, and w_1 through w_k are the weights applied to those variables. The weights for each factor and the various contributing variables, are subject to a constraint that each factor is uncorrelated to all preceding factors (Sudman & Blair, 1998:547).

The main applications of factor analytic techniques, are firstly to reduce the number of variables and secondly to detect structure in the relationship between variables, that is to classify variables. Therefore, factor analysis is applied as a data reduction or structure detection method. The most common type used in market research application, is the principal component analysis (Sudman & Blair, 1998:557) which will be explained briefly.

The extraction of principle components amounts to a variance maximising (varimax) rotation of the original variable space. For example, in a scatterplot we can think of the

regression line as the original X-axis rotated, so that it approximates the regression line. This type of rotation is called variance (variability) of the new variable (factor), while minimizing the variance around the new variable (Statsoft Inc.,1997).

According to Sudman & Blair (1998:548) the key descriptive results obtained from a factor analysis, are the eigenvalues and factor loadings, while, in some instances, factor scores are calculated. However, in the case of this study, no factor scores were calculated.

Eigenvalues, which equal the sum of the squared loadings for the variables on that factor, provide a measure of the percentage of variance in contributing variables that is explained by the factor. The importance of the component or factor is measured by the size of the eigenvalue in relation to the total variance available for distribution. The next step, is to find the component or factor independent of the first factor that will extract most of the remaining available variance. The remaining $n-2$ components are found in a similar fashion (Sudman & Blair, 1998:548).

Factor loadings, which are the correlation between the variables and the factors, are the key to understanding the nature of a particular factor (Sudman & Blair, 1998:548). Squared factor loadings indicate what percentage of the variance in an original variable is explained by a factor (Hair *et al.*, 1995:366).

Factor scores are also calculated for each of the new variables that represent combinations of the original variables (Sudman & Blair, 1998:548). Factor scores are composite measures created for each observation on each variable extracted in the factor analysis. The factor weights are used in conjunction with the original variable values in order to calculate each observation's score. The factor score then, can be used to represent the factors in subsequent analyses (Hair *et al.*, 1995:366).

The question of how many factors to remain, is by its nature thus an arbitrary decision (Sudman & Blair, 1998:557). However, there are some guidelines that are commonly used, and that, in practice seem to yield the best results. The Kaiser criterion states, that factors with eigenvalues greater than 1, should be retained. In essence, this is like saying that, unless a factor extracts at least as much as the equivalent of one original

variable, we drop it. This criterion was proposed by Kaiser (1960) and is probably the most widely used (Statsoft Inc., 1997).

When a satisfactory factor solution has been derived, some meaning must be assigned to each factor, which involves substantive interpretation of the pattern of factor loadings for the variables (Hair *et al.*, 1995:397). All significant factor loadings are usually used in the interpretation process and suggest, as a rule of thumb, to ignore variables with loadings less than .50.

According to Sudman and Blair (1998:549), the overall factor analysis can generally be considered as effective if the total variance explained by the selected factors, exceeds 70%. If this is not the case, it should be noted in the report.

6.5 CROSS-TABULATION

A cross-tabulation table is simple for a bivariate analysis (Sudman & Blair, 1998:475) and is a count of the number of cases that fall into each of several categories when the categories are based on two or more variables considered simultaneously (Churchill, 1992:612). Thus, cross-tabulation allows us to examine frequencies of observation that belong to specific combinations of categories on more than one variable (Statsoft Inc., 1997).

6.6 CONCLUSION

In order to be able to investigate the research problem and objectives, a thorough and formal methodology should be used. The universe from which the sample frame had been derived, was identified.

A preliminary questionnaire, and then the final questionnaire, were drawn up, tested and distributed among 200 respondents by means of fieldworkers, of which a success rate of 144 (72%) were achieved. The results were captured on computer, edited, coded and analysed.

Cronbach Alpha tests were conducted for reliability of the questionnaire, factor analyses were done and cross-tabulations were run.

In the following chapter (Chapter 7) the research findings of the study are discussed.

CHAPTER 7

RESEARCH FINDINGS

7.1 INTRODUCTION

The results of this empirical study are provided in tabular format in this chapter. The first part of the chapter presents all the demographic and ownership information (Section A of the questionnaire). In the next section, all location characteristics (Section C of the questionnaire) as researched, are presented, as well as the results of the reliability tests and factor analyses and finally, some cross-tabulations are provided.

7.2 DEMOGRAPHIC INFORMATION

The first section of the questionnaire (Section A), relates to the demographic information, including gender, age, highest educational qualification and the respondent's position in the business.

7.2.1 Gender and age

Table 7.1 Gender of respondents

Gender	Frequency (n)	Percentage (%)
Male	96	66,7%
Female	48	33,3%
TOTAL	144	100%

Exactly two-thirds (66,7%) of the respondents were male, as can be seen in Table 7.1 while the majority of respondents (41,7%) were between the ages of 30 – 39. Only 17,4% of the respondents were between 20 – 29 years and 41% were older than 40 years of age. The trend, therefore, is proven, that the age of entrepreneurs is on average between 30 – 39 (see Table 7.2).

Table 7.2 Age of respondents

Age	Frequency (n)	Percentage (%)
– 19	0	0%
20 – 29	25	17,4%
30 – 39	60	41,7%
40 – 49	38	26,4%
50 – above	21	14,6%
TOTAL	144	100%

7.2.2 Qualification and position in the business

Table 7.3 shows the highest educational qualifications of the respondents, with exactly 50% of them having some or other sort of tertiary degree. The other 50% have a diploma qualification, a certificate, a matric (grade 12) or less. Again, the tendency shows, that small business entrepreneurs tend to start businesses, not only at earlier ages, but also with less educational qualifications in the form of degrees. [The success rate of these small businesses will have to be investigated in a different study.] Eight (8) respondents (5,6%) did not answer the question, mainly due to the private nature of the question.

Table 7.3 Highest educational qualification

Category	Frequency (n)	Percentage (%)
Grade 10 or less	2	1,5%
Grade 12 or less	24	17,6%
Certificate/Diploma	42	30,9%
BA degree	8	5,9%
B Com degree	12	8,8%
Honours degree	5	3,7%
Master's degree	5	3,7%
Law-related degree	13	9,6%
BSC/Medical degree	25	18,4%
TOTAL	136	100%

Of all the degrees, the medical and BSC degrees (18,4%) are by far in the majority. This could be related to the fact, that this kind of industry really excelled in the residential-based market, seeing that there are maybe many more advantages for them as compared to the average small business. Other degrees that feature specifically in the residential-based market, are the law industry (9,6%) (same reason than the medical profession), and the general B Com degrees (8,8%).

The purpose of the question on the respondent's position in the business, was mainly to identify the "hands-on" experience, knowledge and position of the respondent – in other words, the reliability of the answers received from this respondent (Table 7.4).

Table 7.4 Position of respondent in business

Position	Frequency (n)	Percentage (%)
Owner	66	45,8%
Manager	26	18,1%
Owner and Manager	44	30,6%
Partner	4	2,8%
Attorney	1	0,7%
Secretary	2	1,4%
Receptionist	1	0,7%
TOTAL	144	100%

Of all the respondents, 94,5% are either owner, manager or owner-manager, while another 3,5% is either the partner or the attorney of the business, which leaves only 2,1% of the responses, which could be questionable, because they are either secretaries (2 respondents) or a receptionist (1 respondent).

7.3 OWNERSHIP AND SMME INFORMATION

The purpose of this section, was to identify what kind of businesses and industries are currently utilising the residential-based business as location, as well as the size of the businesses (in regards to amount of employees and turnover).

7.3.1 Form of residential-based business

Table 7.5 indicates the form of small business according to the legislation act of business forms in South Africa, in which the respondent is operating.

Table 7.5 Form of residential-based business

Category	Frequency (n)	Percentage (%)
Sole proprietor	40	27,8%
Partnership	29	20,1%
Close corporation	43	29,9%
Private company	20	13,9%
Public company	5	3,5%
Co-operation	1	0,7%
Trust	1	0,7%
Non-profitable company (Section 21)	3	2,1%
Political party	2	1,4%
TOTAL	144	100%

The majority of residential-based businesses are close corporations (CC's) (29,9%), followed by sole proprietors (27,8%) and then partnerships (20,1%). It shows, that the so-called "smaller" kinds of businesses might be better suited to locate in a residential-based location.

7.3.2 SMME sector according to SIC

Question 6 relates to the kind of sector in which the residential-based business falls, according to the SIC (Standard Industrial Classification), while Question 7 relates more informally to the business being operated.

Table 7.6 Standard Industrial Classification (SIC) of SMME

Standard Industrial Classification (SIC)	Frequency (n)	Percentage (%)
Agriculture	0	0%
Mining & quarrying	0	0%
Manufacturing	7	4,9^
Electricity, gas & water	2	1,4%
Construction	3	2,1%
Motor trade & repair services	8	5,6\$
Wholesale trade, commercial agents & allied services	8	5,6%
Catering, accommodation & other trade	2	1,4%
Transport, storage & communications	2	1,4%
Finance & business services	55	38,2%
Community, social & personal services	55	38,2%
Politics	2	1,4%
TOTAL	144	100%

Seventy-six percent (76,4%) of all the respondents felt, that they belong either in the finance and business services or in the community, social and personal services. This classification is quite a broad classification and to clarify in more depth in what industry the SMME falls, question 7 was an open-ended question, in which the respondents could describe in more detail to which industry they belong. Table 7.7 indicates in more detail, to which industry they belong. Table 7.7 indicates the different kinds of SMME's (sectors) in which the respondents mainly categorised themselves.

Table 7.7 More detailed classification of SMME's

Category	Frequency (n)	Percentage (%)
Media, printing & photography	11	7,8%
Computer industry	8	5,7%
Health, beauty & hairdressing	15	10,6%
Training & personnel	12	8,5%
Medical care	24	17,0%
Attorneys & law (legal)	14	9,9%
Tourism, catering & travel	6	4,3%
Financial & insurance	11	7,8%
Miscellaneous services (plumbing, TV repairs, hardware, locksmith, interior design, florist, maintenance, etc.)	40	28,4%
TOTAL	141	100%

According to Table 7.7, it is quite clear that the majority of residential-based businesses forms part of the service and professional business categories. This was expected, as store-retailing is prohibited at residential businesses by the local governments. The above table is a more general categorisation, which more clearly shows the types of businesses that can run a residential-based business. Three of the respondents did not answer the question.

7.3.3 Employees and turnover

Table 7.8 Full-time employees

Amount of employees	Frequency (n)	Percentage (%)
20 or more	7	4,9%
15 – 19	3	2,1%
10 – 14	12	8,3%
5 – 9	50	34,7%
1 – 4	72	50%
TOTAL	144	100%

Eighty-four percent (84,7%) of all the respondents said, that they have fewer than nine employees. This illustrates, that they all are quite small businesses and also indicates, that a residential-based business has a restricted capacity regarding personnel.

Table 7.9 Annual turnover

Annual turnover	Frequency (n)	Percentage (%)
Less than R150 000	25	20,3%
R150 001 – R500 000	34	27,6%
R500 001 – R1 000 000	30	24,4%
R1 000 001 – R2 000 000	19	15,4%
R2 000 001 or more	16	12,2%
TOTAL	123	100%

Twenty-one respondents (14,6%) did not answer this question, due to the sensitive nature of the question. Of the remaining respondents, 72,3% stated, that their annual turnover is less than R1 000 000, which is a typical small business venture in terms of the South African classification.

7.4 LOCATION CHARACTERISTICS

7.4.1 Property characteristics

The first two questions of Section C in the questionnaire dealt with specifically the question of ownership and whether the property had been rezoned at the local authorities for business purposes or not.

Table 7.10 Owning versus renting of property

Ownership	Frequency (n)	Percentage (%)
Own (freehold)	84	58,3%
Rent (leasehold)	60	41,7%
TOTAL	144	100%

There is no significant difference between the respondents that own residential property and those that rent it (58,3% compared to 41,7%).

Table 7.11 Rezoning of property

Rezoned property	Frequency (n)	Percentage (%)
Yes	87	60,4%
No	57	39,6%
TOTAL	144	100%

The majority (64,4%) of the respondents claimed, that their property had been rezoned. It must be stated at this point, that in many instances, some of the respondents did not know whether the property had been rezoned or not (those respondents renting) and that there could be a bias towards rezoning, because of fear from respondents for local authority's actions, should they find out that they have not yet applied for rezoning.

7.4.2 Previous location

Table 7.12 Previous location of business

Previous location	Frequency (n)	Percentage (%)
Nowhere – started from this residential property	68	47,2%
Shopping mall	5	3,5%
Shopping centre	12	8,3%
Office block	45	31,2%
Suburban shopping centre	10	6,9%
Factory (industrial park)	1	0,7%
Hospital	1	0,7%
Foreign country	1	0,7%
Airport	1	0,7%
TOTAL	144	100%

It is interesting to note, that almost 50% (47,2%) of the respondents do not have any experience at any previous location. Even though 31,2% of the respondents moved from office blocks to residential properties, the percentages show, that there is a trend that many new SMME's start off nowadays from a residential-based property, without even trying the other location options. It, therefore, shows the attractiveness of this location-decision.

7.4.3 Factors/reasons/advantages of managing a residential-based business

Question 13 of the questionnaire dealt with the factors that might have been reasons why SMME's are being managed from a residential-based property and the advantages to use such a location. Twenty-three statements (reasons/advantages) were presented and the respondents had to judge these factors on a five-point scale, for being reasons or advantages of a residential-based business by 1 being "no reason/advantage" and 5 being a "definite reason/advantage".

The results are shown in Table 7.13 and are as follows.

The sum percentages of the two lower boxes (scales 1 and 2) are shown first of all and then the total of the two top-boxes (being 4 and 5 on the scale).

The mean (average) of each item, including the variance and standard deviation of each, are shown in the following columns. In the last column the item-scale correlation of the item is indicated.

Where no mean, variation, standard deviation and item-scale correlation are indicated, it is because these factors were omitted as advantages and/or reasons after the factor analysis was done (Section 7.6).

Table 7.13 continued

Item/reason/ advantage	Two-low box (1&2) (%)	Two-top box (4&5) (%)	Mean	Variance	Standard Deviation	Item-scale Correl.
17. Operations can be done more effectively from a residential property	42,4	47,9	3,139	2,925	1,710	0,69
18. To benefit from tax advantages	41,6	38,9	2,882	2,437	1,561	0,61
19. Create your own work environment	13,2	70,9	4,007	1,743	1,320	0,73
20. Better productivity and time-management	19,4	65,3	3,826	2,018	1,421	0,74
21. Less stress	34,0	47,2	3,271	2,406	1,551	0,79
22. Avoiding rush-hour traffic	39,6	46,5	3,174	2,810	1,676	0,85
23. Greater flexibility for any personal and family life	39,6	45,8	3,160	2,870	1,694	0,83

According to Table 7.13, more than 65% of all the respondents stated, that the following factors were very important reasons/advantages of a residential-based business (they responded either 4 or 5 on the five-point scale (two-top box):

- Much more cost-effective at residential property (74,3%)
- Too expensive at a mall, centre or office block (78,5%)
- Rent too high elsewhere (70,8%)
- Optimal use of property/facilities available (72,3%)
- Easier and better parking facilities for clients (more accessible) (68,8%)
- Choice of better area and suburbs (68,7%)
- Create your own work environment (70,9%)
- Better productivity and time-management (65,3%).

The mean (average) of all 8 of the above factors, are above 3,8 out of the possible 5.

The first three factors (cost-issues) also have a very high item-scale correlation, making them very strong and reliable factors.

Six (6) factors got more than 40% of the respondents' response on either scales 1 or 2 (two-low box), meaning that these six factors are not very strong factors/reasons/advantages of residential-based businesses. They are the following.

- To be closer to the family (64,6%)
- Long-term planning for retirement (45,8%)
- Attitude of management/landlords at previous location (58,0%)
- To start a second job from the residential property (73,6%)
- Operations can be done more effectively from a residential property (42,4%)
- To benefit from tax advantages (41,6%).

These factors are, therefore, not major reasons or advantages why residential-based businesses are a good option in the location-decision.

7.4.4 Factors/problems/disadvantages of managing a residential-based business

Question 14 of the questionnaire dealt with the factors that might be problems or disadvantages for SMME's managed from a residential-based property. Thirteen (13) items (factors) were presented and the respondents had to judge these factors on a five-point scale for being reasons or advantages of a residential-based business, with 1 being "no problem/disadvantage at all" and 5 being "a very big problem/disadvantage".

The results are shown in Table 7.14 and are as follows.

The sum percentage of the two lower boxes (scales 1 and 2) are shown first then the total of the two top-boxes (being scales 4 and 5).

Then mean (average) of each item is shown, together with the variance and standard deviation of each. In the last column the item-scale correlation of the item is indicated.

Where no mean (average), variance, standard deviation or time-correlation are shown, it was omitted after the factor analysis had been done (see Section 7.6) and those factors were not proven reliable factors as disadvantages/problems for residential-based businesses.

Table 7.14 Problems/disadvantages of a residential-based business

Item/problems/ Disadvantages	Two-low box (1&2) (%)	Two-top box (4&5) (%)	Mean	Variance	Stand. Deviat.	Item-scale Correl.
1. Money and capital risk	50,2	16,1	2,196	1,584	1,259	0,71
2. More pressure to perform	58,1	23,8	2,378	1,899	1,378	0,78
3. Need to be an expert in a variety of tasks	43,4	31,5	2,678	2,414	1,554\	0,73
4. Difficult to leave work behind (going into after-hours)	48,3	31,5	2,678	2,414	1,554	0,73
5. Irregular income	67,8	17,5	-	-	-	-
6. Loneliness and isolation	82,5	11,9	1,671	1,236	1,112	0,87
7. Motivation difficulties	79,7	9,8	1,643	1,236	1,112	0,87
8. General disruptions (children, friends etc.)	79,0	11,2	1,664	1,258	1,122	0,77
9. Insurance and liability	71,3	11,2	-	-	-	-
10. Application for consent and business rights	54,6	27,3	2,476	2,347	1,532	0,82
11. Labour relations and personnel aspects	70,6	9,8	1,860	1,435	1,198	0,74
12. Marketing and advertising	65,0	21,0	2,175	2,046	1,430	0,71
13. Local authority regulations	53,2	27,3	2,503	2,194	1,481	0,84

The following 4 problems/disadvantages were shown by the respondents as constituting the four biggest problems or disadvantages of residential-based businesses. (They are the only 4 items with a higher response rate than 25%). This is a small figure,

compared to the most important advantages (Table 7.13), showing that the respondents felt, that the advantages by far outweigh the disadvantages.

- Need to be an expert in a variety of tasks (35%)
- Difficult to leave work behind (going into after-hours) (31,5%)
- Application for consent and business rights (27,3%)
- Local authority regulations (27,3%).

Five (5) items achieved scores of higher than 70% in the two-low box from the respondents. This shows, that these 5 items are especially minor (if any) problems or disadvantages for residential-based businesses.

- Loneliness and isolation (82,5%)
- Motivation difficulties (79,7%)
- Disruptions by children, friends, etc. (79,0%)
- Insurance and liability (71,3%)
- Labour relations and personnel aspects (70,6%).

The mean for all the above items are all below 1,9 out of a possible 5.

The factor analyses done on these items for Questions 13 and 14, are discussed in detail in Section 7.5, while conclusions and recommendations of all these items and factors are discussed in Chapter 8.

7.4.5 Residential-based businesses growth figures

Questions 15 and 16 deal with the specific growth of the residential-based business in regards to the previous location – if any. Question 15 specifically relates to the growth in sales or turnover, while Question 16 relates to the growth in customer base for the enterprise.

Table 7.15 Growth in sales/turnover

Sales growth	Frequency (n)	Percentage (%)
Worse than before	1	0,7
The same than before	8	5,9
Better – between 0 – 25%	22	15,4
Better – between 26 – 50%	22	15,4
Better – higher than 51%	22	15,4
No previous location	68	47,2
TOTAL	143	100%

Only 6,6% of the respondents' sales were down or less than at their previous location, while 46,2% of the businesses had better sales than at their previous location. This shows, that most of these enterprises made the right decision to move from their previous location to a residential-based business.

Table 7.16 Growth in customers

Customer growth	Frequency (n)	Percentage (%)
Worse than before	1	0,7
The same than before	8	5,9
Better – between 0 – 25%	22	15,4
Better – between 0 – 25%	22	15,4
Better – between 26 – 50%	22	15,4
Better – higher than 51%	22	15,4
No previous location	68	47,2
TOTAL	143	100%

Exactly the same percentages than those of Table 7.15, mentioned that these enterprises have the same or less customers than at the previous location. Again, the majority of the respondents, 52,8% that relocated, (Table 7.12) said that they had a better customer base than at their previous location. One of the respondents was not

sure of either the change in sales or customers and, therefore, did not answer these two questions.

7.4.6 Specific advantages of residential-based business

Question 17 was an open-ended question, asking the respondents to write in their own words what other important advantages the residential-based business had for them. The purpose here was to give the respondents no limits to their views and to evaluate all the different advantages given. Only the first and most important advantage from each respondent was taken to make the coding and categorising more effective.

All the answers were evaluated and grouped into categories having some correlation or common characteristics. Each category was labelled and a total of 18 different categories (advantages) were derived from the open-ended question.

Table 7.17 Specific advantages of residential-based businesses

Advantages	Frequency (n)	Percentage (%)
Informal, relaxed atmosphere and environment (view, peaceful and personal touch)	20	25,6%
More exposure and visibility	9	11,5%
Better target marketing	2	2,6%
More passing-by trade by means of traffic	3	3,8%
Less crime and better security	1	1,3%
Lower overhead costs (economical and affordable)	5	6,4%
More centralised location	4	5,1%
Better facilities (sharing) and more space	4	5,1%
Own your own property – expansion and investment	5	6,4%
Less travelling	3	3,8%
Entertainment facilities	1	1,3%
Away from CBD	1	1,3%
Accessibility – on major bus routes, schools and universities	12	15,4%

Table 7.17 continued

Advantages	Frequency (n)	Percentage (%)
Ample parking	1	1,3%
More flexible and versatile	3	3,8%
Additional marketing opportunities	2	2,6%
Make own rules and regulations	2	2,6%
TOTAL	78	100%

Because of the fact that this was an open-ended question, the respondent had the choice whether to answer this question or not. This resulted in 45,8% of the respondents not answering this question and of the remainder 25,6% mentioned that the informal, relaxed atmosphere and environment with a more peaceful surrounding and their own personal touch, were the greatest advantages of a residential-based business. The second most important advantage, was the accessibility for the clients, namely that they can now live and work on bus, school and university routes (15,4%). The third most important advantage, is the fact that visibility and higher exposure to the clients are now possible (11,5%).

7.4.7 Specific disadvantages of residential-based business

Question 18 was an open-ended question, asking the respondents to write in their own words what other important disadvantages the residential-based business had for them. The purpose here, was to give the respondents no limits to their views and to evaluate all the different disadvantages given. Only the first and most important disadvantage from each respondent were taken into consideration in order to make the coding and categorising more effective.

All the answers were evaluated and grouped into categories that had some correlation or common characteristics. Each category was labelled and the following total of 13 different categories (disadvantages) were derived from the open-ended question.

Table 7.18 Specific disadvantages of residential-based businesses

Disadvantages	Frequency (n)	Percentage (%)
Traffic noise and congestion	4	8,0%
Little walk-in trade (pass too fast)	5	10,0%
Disruptions at doorstep (hawkers, beggars and vendors)	4	8,0%
Less professional look	1	2,0%
General maintenance on property	5	10,0%
Local authorities (strict rules and regulations regarding business rights, rezoning and advertising)	8	16,0%
Neighbours complaining	1	2,0%
Less facilities available (space, etc.)	2	4,0%
Crime and security	5	10,0%
Not enough parking	2	4,0%
Distractions (privacy) and after-hour clients (long hours)	8	16,0%
Not part of corporate culture (isolation)	4	8,0%
High capital lay-out	1	2,0%
TOTAL	50	100%

Sixty-five percent (65,3%) of the respondents did not answer this question, which shows that more than two-thirds of the respondents did not feel that there are any other disadvantages to a residential-based business. I.r.o. the other respondents, the two most important disadvantages (16,0%) each to the residential-based business are the local authorities' strict rules and regulations on business rights, rezoning and advertising, as well as the general distractions and after-hours clients visiting a residential-based business.

The other most important disadvantages (10%) are traffic, general maintenance, crime and security.

7.4.8 Actions and recommendations

The last question (Question 19) of the research questionnaire dealt with specific actions and recommendations to be made by respondents. Again, only the most important recommendation for a successful residential-based business from each respondent, was taken into consideration to simplify the coding and research process. The purpose of this question was, to gather the most important aspects of managing a successful residential-based business from the viewpoint of the owners/managers themselves. Through these suggestions, actions and recommendations could be formulated for use by academics and consultants.

Table 7.19 Actions and recommendations

Recommendations	Frequency (n)	Percentage (%)
Budget (enough working capital)	3	4,5%
Advertising and marketing (using of information boards and prominent colours – visibility)	10	15,2%
Correct location and address (near a corner, robot or stop)	11	16,7%
Market research (area, product, clients)	1	1,5%
Time-management and self-discipline	4	6,1%
Roles and responsibilities of workers	1	1,5%
Accessibility for clients	3	4,5%
Professional work environment (interior design and warm atmosphere)	4	6,1%
High quality of service	1	1,5%
Telecommuting if possible	1	1,5%
Security – work in locational groups	1	1,5%
Enough parking available (separate entrance and exit)	4	6,1%
Separate clients from suppliers	2	3,0%
More realistic action and support from local authorities	10	15,2%
Know rules and regulations of city council and labour unions	1	1,5%

Table 7.19 continued

Recommendations	Frequency (n)	Percentage (%)
Know the specific types of businesses that are suited for this location	2	3,0%
Consult with family and colleagues	1	1,5%
Buy rather than rent	1	1,5%
Buy upmarket to avoid over-capitalisation	1	1,5%
Build good relations with neighbours, customers and personnel	2	3,0%
Stay in the same area as previously to keep your customer base	1	1,5%
Blend in with other businesses (be compatible)	1	1,5%
TOTAL	66	100%

Fifty-four percent (54,2%) of the respondents did not propose any actions or recommendations for managing a residential-based business successfully. The three recommendations that stood out as the most important suggestions are firstly, to choose the correct location address (16,7%) and then also to do effective advertising and marketing (15,2%) and to get more realistic action from local authorities (15,2%).

7.5 RELIABILITY TESTING

A very high reliability count was achieved with a Cronbach Alpha coefficient of higher than 0,80 for most of the parts of the questionnaire. As noted in Chapter 6, a reliability level of 0,70 would be enough on predictor tests or measures of construct. Six (6) items of the 23 in question 13 and two (2) items of the 13 in question 14, had been deleted in the process, due to the unreliability of their nature. It was found, that these factors were specifically designed for a home-based business and did, therefore not apply to the reasons/advantages of a residential-based business. These items had been removed before the final factor analysis was done.

7.5.1 Reliability – Reasons/Advantages of residential-based business

A Cronbach Alpha coefficient of 0,8711 was achieved for the reasons or advantages of a residential-based business. The squared multiple correlations (SMC) (or item-to-total correlation) and the Cronbach Alpha's for each reason/advantage, are shown in Table 7.20.

Table 7.20 Cronbach Alpha coefficients for reasons/advantages of a residential-based business

Reason/Advantage	SMC (item-to-total correlation)	Cronbach Alpha
1. Much more cost-effective at home	0,4765	0,8619
2. Too expensive at a mall, centre or office block	0,7932	0,8636
3. Rent too high elsewhere	0,8016	0,8628
4. Optimal use of property/facilities available	0,4551	0,8593
5. Easier expansion in future (more space)	0,4122	0,8705
6. Easier and better parking facilities for clients (more accessible)	0,2239	0,8758
7. Choice of better area and suburb	0,4896	0,8655
8. More business and growth opportunities	0,5256	0,8637
9. Lower capital lay-out	0,3769	0,8633
10. Attitude of management/landlords at previous location	0,2190	0,8710
11. Operations can be done more effectively from a residential property	0,5475	0,8581
12. To benefit from tax advantages	0,3972	0,8647
13. Create your own work environment	0,6214	0,8580
14. Better productivity and time-management	0,6214	0,8562
15. Less stress	0,4492	0,8695
16. Avoiding rush-hour traffic	0,5198	0,8695
17. Greater flexibility for my personal and family life	0,5534	0,8598

7.5.2 Reliability – Problems/Disadvantages of residential-based business

A Cronbach Alpha coefficient of 0,8480 was achieved i.r.o. the problems or disadvantages of a residential-based business. As discussed in Chapter 6, this is a strong identification of acceptance and reliability of the question. The squared multiple correlations (SMC) (or item-to-total correlation) and the Cronbach Alpha's for each problem/disadvantage, are shown in Table 7.21.

Table 7.21 Cronbach Alpha coefficients for problems/disadvantages of a residential-based business

Problem/Disadvantage	SMC (item-to-total correlation)	Cronbach Alpha
1. Monetary and capital risk	0,4338	0,8310
2. More pressed to perform	0,4294	0,8380
3. Need to be an expert in a variety of tasks	0,4308	0,8380
4. Difficult to leave work behind (going into after-hours)	0,2763	0,8406
5. Loneliness and isolation	0,6756	0,8319
6. Motivation difficulties	0,6520	0,8333
7. General disruption (children, friends, etc.)	0,3544	0,8376
8. Application for consent and business rights	0,5817	0,8312
9. Labour relations and personnel aspects	0,4215	0,8340
10. Marketing and advertising	0,3677	0,8348
11. Local authority regulations	0,5476	0,8321

7.6 FACTOR ANALYSIS

The appropriate multivariate technique which has been used in this particular research study, is known as factor analysis. As already referred to in Chapter 6, the term "factor analysis" describes a group of statistical methods whose primary purpose is to condense data contained in a fairly large number of variables into a smaller set of new "variables", called factors (Bisschoff, 1989:91).

The reduction in the number of variables, makes the sheer volume of variables easier to manage, with a minimum loss of the information contained in the original variables. Although factor analysis uses an advanced form of correlation, it differs from normal correlation analysis, in that there is no dependent variable. All variables are evaluated simultaneously (Bisschoff, 1989:92).

Two factor analyses were done. The first was performed on a set of variables which described the different reasons and/or advantages of residential-based businesses, while the second factor analysis was performed on those variables describing the problems and/or disadvantages of residential-based businesses.

7.6.1 Factor analysis on reasons/advantages of residential-based businesses

The first factor analysis was performed i.r.o. question 13 and these results are provided in the following section, with Table 7.22, representing the eigenvalues and table 7.23 to table 7.25 the extraction of the principal components for each factor.

Table 7.22 Eigenvalues – explained variance in three-factor solution

Factor	Eigenvalue	Cumulative variance (%)	Cronbach Alpha
1	5,801	25,06%	0,826
2	2,060	35,23%	0,857
3	1,379	46,79	0,760

With the Keiser criterion applied (p. 143-144), three factors remained with eigenvalues greater than 1. These three factors explain 46,79% of the variance within the variables. All three factors achieved reliability-test scores of above 0,75 on the Cronbach Alpha's.

From the factor analysis, it seems like the reasons and/or advantages of a residential-based business, analysed by the sample, can be categorised into the following three factors.

- Factor 1: Location and growth advantages
- Factor 2: Cost (financial) advantages
- Factor 3: Personal advantages

7.6.1.1 Factor 1. Location and growth advantages

Factor 1 has a high eigenvalue of 5,801 and explains 25,06% of the variance. The relative high eigenvalue, relative to the others, indicates the importance of this factor. Factor 1 consists of 11 variables, which all describe *location or growth* advantages of the residential-based business.

Table 7.23 Extraction of principal components – Factor 1

Location and/or growth advantage	Factor loading
13. Create your own work environment	0,648
7. Choice of better area and suburb	0,637
8. More business and growth opportunities	0,613
14. Better productivity and time-management	0,610
15. Easier expansion in future (more space)	0,599
11. Operations can be done more effectively at a residential property	0,558
4. Optimal use of property/facilities available	0,557
12. To benefit from tax advantages	0,522
9. Lower capital lay-out	0,360
10. Attitude of management/landlords at previous location	0,312
6. Easier and better parking facilities for clients (more accessible)	0,296

7.6.1.2 Factor 2. Cost advantages

Factor 2 has an eigenvalue of 2,060 and explains, together with Factor 1, 35,23% of the variance. It consists of three variables, which all relate to *cost advantages*.

Table 7.24 Extraction of principal components – Factor 2

Cost advantage	Factor loading
3. Rent too high elsewhere	0,992
2. Too expensive at a mall, centre or office block	0,923
1. Much more cost-effective at residential property	0,550

7.6.1.3 Factor 3. Personal advantages

With a notably lower eigenvalue of 1,379, compared to that of the previous two factors, the third and last factor is also less important than the previous two. Just less than half (46,79%) of the cumulative variance is explained by the three factors.

Table 7.25 Extraction of principal components – Factor 3

Personal advantage	Factor loading
16. Avoiding rush-hour traffic	0,954
15. Less stress	0,545
17. Greater flexibility for my personal and family life	0,513

7.6.2 Factor analysis on problems/disadvantages of residential-based businesses

The second factor analysis was performed i.r.o. question 14 and these results are provided in the following section with Table 7.26 representing the eigenvalues and table 7.27 to table 7.29 the extraction of the principal components for each factor.

Table 7.26 Eigenvalues – explained variance in three factor solution

Factor	Eigenvalue	Cumulative variance (%)	Cronbach Alpha
1	4,390	35,22%	0,809
2	1,412	45,45%	0,779
3	1,198	53,33%	0,734

With the Keiser criterion applied (p. 143-144), three factors remained with eigenvalues greater than 1. These three factors explain 53,33% of the variance within the variables. All three factors achieved reliability-test scores of above 0,73 on the Cronbach Alphas.

From the factor analysis, it seems like the problem and/or disadvantages of a residential-based business, analysed by the sample, can be categorised into the following three factors.

- Factor 1: Personal advantages
- Factor 2: Local authorities' rules and regulations
- Factor 3: Management disadvantages

7.6.2.1 Factor 1. Personal disadvantages

Factor 1 has a high eigenvalue of 4,390 and explains 35,22% of the variance. The relative high eigenvalue, relative to the others, indicates the importance of this factor. Factor 1 consists of 3 variables which all describe *personal disadvantages* of the residential-based business.

Table 7.27 Extraction of principal components – Factor 1

Personal disadvantages	Factor loading
5. Loneliness and isolation	0,916
6. Motivation difficulties	0,911
7. General disruptions (children, friends, etc.)	0,479

7.6.2.2 Factor 2. Local authorities' rules and regulations

Factor 2 has an eigenvalue of 1,412 and explains, together with Factor 1 cumulatively, 45,45% of the variance. It consists of four variables which all have to do with *the local authorities' rules and regulations*.

Table 7.28 Extraction of principal components – Factor 2

Local authorities' rules and regulations	Factor loading
8. Application for consent and business rights	0,863
11. Local authority regulations	0,828
9. Labour relations and personnel aspects	0,451
10. Marketing and advertising	0,300

7.6.2.3 Factor 3. Management disadvantages

Factor 3 has a notably lower eigenvalue of 1,379, compared to the previous factors and, therefore, this factor is also less important than the previous two. Just more than half (53,33%) of the cumulative variance is explained by the three factors.

Table 7.29 Extraction of principal components – Factor 3

Personal disadvantages	Factor loading
2. More pressure to perform	0,964
3. Need to be an expert in a variety of tasks	0,611
1. Monetary and capital risk	0,447
4. Difficult to leave work behind (going into after-hours)	0,361

7.7 CROSS TABULATIONS

A series of cross tabulations were conducted from the questionnaire of which many of the results were purely for interest purposes and would not really contribute to the objectives of the study. While many of these results gave Chi-square scores of less than 0,05 and are, therefore, reliable and valid, the reporting of those results will not directly contribute to the proposed outcome of this study.

One very important cross-tabulation that was conducted between question 15 and question 16, is especially of importance to this research study. This specific cross-tabulation was done to see, if there was a direct correlation between growth figures regarding monetary terms and *growth figures regarding customer base*. The results of this cross-tabulation will show whether this location-decision did enhance both sales, its not being \only "footsteps" or vice versa.

7.7.1 Growth figures

Table 7.30 shows the results for the respondents' views on their growth in sales or turnover against the growth in customers or "footsteps" for the residential-based business.

Table 7.30 Cross-tabulation regarding growth at the residential-based business

Sales/Turnover	None	Same	0-25%	26-50%	51% +
None	29,37	0	0,70	0	0
Same	0	10,49	0	0	0
0-25%	0	4,90	16,78	2,10	1,40
26-50%	0	3,50	3,50	9,09	2,80
51% +	0	2,10	2,10	3,50	7,69

The cross-tabulation table shows clearly, that there is a correlation between growth in sales versus growth in customers at the residential-based businesses. "None" means, that the respondents were not located at a previous location and the 29,37% can, therefore, not be seen as relative to any growth.

Should the business have a certain growth percentage i.r.o. customers, the growth in sales also shows the same result. This is mainly the case right through the cross-tabulation conducted. A total of 73,42% shows this correlation and the Chi-square is a valid 0,001, which is very good as against the acceptable 0,05.

This correlation mainly shows, that the residential-based businesses are still very dependent on a high customer-base to enhance their sales. The marketing aspect regarding residential-based businesses towards sales and customers, therefore, is still very applicable, no matter where the business is located. A positive aspect for the residential-based location, is that most of the respondents showed an increase in both sales and customers, since they moved to this location-decision (where applicable).

Against the background and information obtained in the research findings of Chapter 7, these results will be concluded and recommendations regarding residential-based businesses as an alternative location-decision for SMME's made in Chapter 8.

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

In the previous chapter the research findings of the study were discussed. This last chapter of the study focuses on the conclusion and recommendations. Firstly, the conclusion is drawn, then recommendations are made and lastly the limitations of the study are discussed and some areas for future research are also identified.

The induction and deduction processes are used in research for reasoning in a sequential manner. *Induction* occurs when facts are observed and the question is asked: "*Why is this?*" A tentative explanation is then derived. *Deduction* is the process by which we test whether the tentative explanation is capable of explaining the fact and it is also the final step in the research process (Cooper & Schindler, 1998).

During the *induction* process, literature was explored so as to find out more about the background and development of entrepreneurs and their small business ventures. The next issue raised, was one of the most important long-term and strategic decisions for the entrepreneur and/or small business, namely the location-decision. All the location theories were discussed, after which the different types of locations for SMME's were investigated.

This left the researcher at a stage where future empirical research seemed necessary especially i.r.o. this new phenomenon, namely residential-based business. The conclusions derived from this literature and empirical study, were as follows.

8.2 LITERATURE REVIEW

The concept of entrepreneurship is a reasonably complex one and this issue was discussed in relation with initiators of small businesses (Chapter 2 of the literature study). A distinct difference was found between entrepreneurship and small business ventures, even though entrepreneurs are usually initiators of small, medium and micro-enterprises (SMME's). The difference especially becomes more evident with time. The

business acumen of the entrepreneur continuously increases, while the average small business keeps on operating on a day-to-day basis.

SMME's and their contribution to the economy were discussed after a thorough investigation into the definition and characteristics of SMME's. It was also necessary to investigate the differences between SMME's and larger firms.

Chapter 3 took a closer look into the SMME environment. Emphasis was placed on the resources necessary for SMME's, the structure of SMME's and the managerial influence and control of SMME's.

The importance of SMME's in the business environment, as well as the different advantages and disadvantages that they consist of, were thoroughly evaluated by means of a basis built on the literature study.

As part of the survival issue of an SMME, location is one of the most important long-term and strategic decisions that an entrepreneur should make.

Chapter 4 narrowed the focus point of SMME's down to the location-decision. All the different literature theories on location were investigated, as well as the relevance that these theories hold for the SMME's survival or growth.

The following section focuses on the location search for the small business. Whether it is a new small business starting with operations, or a current small business wanting to relocate or expand, this location-decision is one of crucial importance and should be thoroughly investigated, planned, organised and implemented.

One of the major issues of this study, was to investigate all the different factors that have to be taken into consideration before a location-decision is made. All of these factors were investigated in relation to the literature and previous empirical studies. These multiple factors can be categorised into quantitative and qualitative factors, as well as primary and secondary factors. It is very important to bear in mind, that the factors to be considered, will strongly depend on the type of SMME in question.

The location-decision then has to be made and this decision can also be quantified (for example, by using the SLAM-model), again bearing in mind, that most small businesses do not have access to all the quantifiable information sometimes needed. It, therefore, usually must be considered as solely a qualitative decision. That is why a thorough investigation of each location decision is of critical importance.

The last of the literature study chapters (Chapter 5), investigates the different types of locations available for SMME's. All the advantages and disadvantages of the different locations were discussed and it is again necessary to mention, that for different types of SMME's (industries), different locations will be suited. In light of the objectives of the study, special emphasis was put on home-based businesses and residential-based businesses. The researcher found distinct differences between the two types of locations, in the sense, that a home-based business is where a part of the house/home/dwelling is used for business purposes and the rest for accommodation.

A residential-based business, on the other hand, is the same as a home-based business, except that the whole property is used for business purposes and no full-time occupants are living in the home.

The researcher, bearing these definitions in mind and the sudden new trend of emerging residential-based businesses, undertook a thorough empirical study in the greater Pretoria metropolitan area, to investigate the residential-based business as an alternative location-decision for SMME's and hereby was able to develop, propose and recommend that specific actions be taken in order to manage a successful residential-based business.

The following objectives for the study were further investigated by way of the empirical study (Chapters 6 and 7).

Primary objective

- An investigation of residential-based businesses as an alternative for small and medium size enterprises.

- **Secondary objectives**

The secondary objectives are to measure –

- the effectiveness of residential-based businesses as location for SMME's;
- what kind of SMME's are likely to make a success of a residential-based location;
- the influence and problems perceived from the local authority regarding a residential-based business; and
- the growth of residential-based businesses.

8.3 CONCLUSIONS

The following conclusions relating to the overall objectives of the study are derived from the empirical research conducted. (Chapters 6 and 7.)

8.3.1 Demographic characteristics

Although this information does not directly contribute to any of the objectives of the study, it is interesting to note, that the majority of entrepreneurs/small business managers located in residential-based locations, are male and between the ages of 30 to 39. This age group can relate to a general trend among entrepreneurs – younger than the average top management or directors' age positions.

Almost one third of all the respondents have a highest qualification of a certificate or diploma while almost another third possess over a law-related or medical-related degree. Only 8,5% of the respondents have a B Com degree. This phenomenon can be related to an aspect stated later in the conclusions, namely the fact, that the majority of the residential-based businesses at this stage are either professional institutions or services which do not need a high level of education.

A qualitative reliability test for the validity of the questionnaire, could also be found in the biographical information, in the light of the fact, of that almost 95% of the respondents were either managers or the owners of the business, or both. This gave the researcher

an advantage above the average business response rates, in the sense, that these managers/owners are usually present at their business location, while the opposite happens at larger, more corporate firms.

8.3.2 SMME characteristics

As stated in Chapter 7, almost 80% of the SMME's researched are operating as sole proprietors, partnerships or close corporations a phenomenon, which again reflects on the typical characteristics of most small firms in South Africa.

A very important part of the study, gives the answer to objective 2, namely what specific kind of SMME is more likely to succeed as a residential-based business. Finance, business services, the community, social and personal services were without doubt the most common factors i.r.o. respondents, according to the SIC (Standard Industrial Classification). But this is too wide a classification and further investigations showed, that the following kind of small businesses are currently operating very efficient from a residential-based business.

- Medical care (including all kinds of medical professions)
- Health and beauty
- Legal industry (attorneys and law-related businesses)
- Training and personnel
- Finance and insurance
- Media, printing and photography.

Many smaller miscellaneous services also operate successfully from this location, but the six categories above, are especially active in this new-location trend.

Even though no significant results were reflected from the annual turnover, it was quite interesting to note, that almost 85% of all the businesses that were part of the study, had only nine employees or less, confirming their SMME status.

8.3.3 Property characteristics

Most of the respondents who rent their property, were not sure if the property had been re-zoned for business purposes or not. Many of them also did not know if it was necessary or not – this showed the researcher, a definite lack of knowledge and ignorance regarding the rules and regulations of local authorities. The principles and regulations of these authorities are obtainable at their offices and Appendix C also shows the manual of application for consent for a home-undertaking. This also relates to objective 3 of the study, namely the problems experienced with local authorities.

8.3.4 Factors/reasons/advantages of residential-based businesses

One of the main focuses of the study related to objective 4, namely the specific advantages that residential-based businesses might have over other locations. The following advantages were the most important, according to the respondents' views (they include both the pre-structured questions, as well as the open-ended questions' results).

- A residential property generates greater cost-effectiveness.
- It is too expensive at a mall, centre or office block.
- The rent is too high elsewhere.
- At a residential property, the optimal use of property and facilities are available.
- Residential-based properties are easily accessible to clients (easier and better parking facilities).
- The residential property can be chosen in a good area or suburb.
- The entrepreneur can create his or her own work environment.
- Better productivity and time-management can be achieved.
- The informal, relaxed atmosphere and environment of the residential business.

- More exposure and visibility that the residential property offers.

When all the items were put through a factor analysis, the following three factors were identified as the three main categories (factors) of why residential-based businesses are seen as constituting an effective location-decision.

- Factor 1. The location and growth advantages appeared to constitute the major factors i.r.o. residential-based businesses.
- Factor 2. The cost (financial) advantages were the second major factor i.r.o. for this location-decision.
- Factor 3. Personal advantages were the last important group justifying this location-decision.

8.3.5 Factors/problems/disadvantages of residential-based businesses

It was of vital importance to consider not only the benefits of this location-decision, but also at the problems facing SMME's who pursue this important change in location. From the pre-chosen items given to the respondents, as well as the open-ended questions, the following disadvantages of residential-based businesses were seen as being the biggest problems.

- The entrepreneur needs to be an expert in a variety of tasks.
- It is difficult to leave work behind and to your "own" home.
- Application for consent and business rights from local authorities.
- Local authorities' regulations (regarding advertising, etc.).
- Distractions and after-hours working (long hours).
- Little walk-in trade.
- General maintenance of property.

- Crime and security.

After a factor analysis had been done on all items, the following three factors were developed as the major problems and disadvantages i.r.o. residential-based businesses.

- Factor 1. Personal disadvantages.
- Factor 2. Local authorities' rules and regulations.
- Factor 3. Management disadvantages.

All the applicable reliability tests showed proper results (Cronbach Alphas) and the advantages and disadvantages derived from this research, are a large aid in making the proper recommendations to SMME's and developing a framework of how such businesses should act, before making this location-decision.

8.3.6 Residential-based growth figures

Objective 5 of the study specifically deals with the growth figures of the residential-based business. The purpose of this question, was to investigate if the SMME is better off at the new location than at the previous one (if any). This could prove, that for the right kind of business to move to a residential-based property, could be beneficial in terms of growth.

The major limitation of this question, was the fact, that almost one-third of the respondents did not run a business from a previous location and that this residential-based option was their first location. The rest of the respondents' views were still very much informative and reliable and valid results could be drawn from it.

Regarding the growth in sales (or turnover), almost six out of every possible seven respondents did experience some or other positive growth in sales. When the same question was asked about the growth in customer numbers (or "footsteps"), the same positive results were found, but this time five out of every seven respondents mentioned, that they experienced growth in their customer base. This difference (even though very small) proves to be quite an interesting phenomenon. It would seem, that

the advantage of “footsteps” in shopping centres/malls and other locations are missing in this location-decision: something (even though minor, according to the research) that should be taken into serious consideration when making the location-decision (see recommendations).

For the purpose of reliability, as well as of drawing the correct conclusions, a cross-tabulation was done between the growth in sales and the growth in customers. These showed very positive results and there was a strong correlation between these two independent variables, proving that both the sales and customers of the majority SMME's grew at the same level and percentage as against their previous location's figures.

The above conclusions, together with the rest of the research results achieved, met all of the objectives stated in Chapter 1, except the primary and most important objective of all – giving recommendations and setting a framework together for future and current SMME's to locate their business at a residential-based property. The following section addresses those issues.

8.4 RECOMMENDATIONS

The purpose of this section is to make a contribution to research literature by referring to specific actions and recommendations to effectively and successfully exploit the residential-based business as a location of SMME's.

8.4.1 Recommendations on type of business

It is recommended, that a proper evaluation should first of all be done in order to decide if the type of SMME locating/relocating to this residential property, is the correct business for the location. The following enterprises are likely to succeed in this kind of location, namely:

- service industries;
- finance and insurance industries;

- training and personnel;
- media, printing and photography;
- medical professions (excluding clinics and hospitals); and
- legal professions.

The manufacturing industry does not seem to be as popular, for obvious reasons, but this phenomenon might need a different research study before a final decision can be made.

8.4.2 Recommendations on workforce

The SMME is likely to perform better if the workforce can be restricted to fewer than 10 employees. The residential property probably can allow for more employees than a business in a shopping centre or office, but the entrepreneur should be aware of being influenced by the size of the property. Overhead costs (like salaries and wages) should, therefore, still be kept at a minimum.

8.4.3 Recommendations on local authorities

This section doubtlessly poses a major problem for most owners/manages of SMME's locating to residential properties. To ensure, that the relocating runs as smoothly as possible, the following procedures should be followed.

- Decide on the area or suburb (Chapters 3 and 4)
- Consult first of all with the local authority of that region, to find out what specific regulations there are for that particular area/suburb.

Even though South Africa has a common development programme for all local authorities in the country, every municipality has its own town-planning scheme as derived from the IDP. Next to this town planning scheme, they again have rules and regulations for each area/suburb. Even though many SMME owners do not understand

this, it is quite obvious, that not every area/suburb and even all streets can be changed into business locations.

Certain areas (like CBD's) are primarily being developed for economic development, but a proper system needs to be in place for every area in a town/city in order to keep peace and justice.

- Find out what is needed to register the SMME at the local authority.

The entrepreneur now needs to find out which one of the following is needed.

- The acquiring of permission as a SMME doing business, at the local authority (business rights).
- Applying for consent to run a business from the residential property.
- Applying for re-zoning of the residential property.

The above steps are simplified, as stated above, but this is the logical sequence in which the SMME should apply for permission. Most SMME's could get away, by doing only the first step, while others (like panel-beating, etc.) will have to re-zone their residential property. (Each local authority has a proper manual on the procedures of attaining business right.)

It is important to note, that this process takes a while, as each case is treated on merit and evaluated individually. Local authorities have to decide whether the operations of the business are going to blend into the area/suburb or whether that area is not suited for that kind of industry.

8.4.4 Recommendations on managing this location-decision

This section deals with the most important part of the study and that is, to suggest actions and recommendations to the SMME on how to locate and then to manage the residential-based business in order to ensure long-term success and profitability. It is, however, important to mention, that there is no substitute for the basic principles of

management towards ensuring success. However, in order to obtain maximum results from a residential-based location, the following recommendations are made.

- **Market research**

The right area, product and clients should be chosen, seeing that location is a long-term, strategic decision and cannot simply be changed overnight. Make sure, therefore, that the basic marketing concepts of the SMME fit the location.

- **Know if the type of business is suited for this location**

Many SMME's do not qualify for this kind of location, even if the local authorities allow it. The daily turnover of clients, traffic congestions, distribution problems and many other business principles, could make this location-decision inappropriate.

- **Stay in same area as the client-base**

If possible, stay in the same area/suburb as where the current client-base is. To move away and find new customers is hard enough – try to stick to the current client-base.

- **Application for consent and business rights from local authorities**

This step is discussed in 8.4.3, but the importance thereof cannot be emphasised enough. This should be the first step for any SMME after deciding on specific areas.

- **Local authority regulations**

These regulations can also cause a lot of problems, except if the entrepreneur is well informed about the latest regulations. Especially advertising and marketing, can cause a lot of problems, seeing that many owners do not know how large, where, etc., the advertising boards might be displayed. All the other regulations like rates and taxes should also be known and adhered to.

- **Buy rather than rent**

Although this option is not always viable, this could be one of the best investments the entrepreneur could make. By buying, the SMME is saving a lot on rent costs, as well as the inconvenience of the landlord – this could lead to the same situation as having a landlord at a shopping centre or in office block.

- **Buy upmarket to avoid over-capitalisation**

Again this option is not always possible, but it is important to see this location-decision as a long-term investment and the entrepreneur would not like to face the option of re-locating every two to three years.

- **Blend in with other businesses**

This means being compatible. Make sure that the location is compatible with other businesses surrounding the SMME. By means of these long-term relationships, outsourcing and facility sharing could be a possibility in the future.

Another important reason is, that customers tend to visit next-door businesses if this business is in the same kind of field or industry than the first one visited. This new phenomenon, namely “residential business-parks”, could develop and take over the shopping centre phenomenon.

- **Correct “address” in the area/suburb**

This means that the correct “spot” should be chosen. Locating at a stop street, robot or corner, tends to attract the attention of more motorists and pedestrians. This could overcome one of the major disadvantages of a residential-based business, namely visibility.

- **Accessibility for clients**

This issue has been raised before, but cannot be over-emphasised. The SMME has to make sure, that the residential property is accessible for clients. This can be ensured

by locating near highways or main roads, bus routes, schools, universities, etc. It should never be a problem or an inconvenience for the client to visit the business.

One of the major disadvantages pointed out by respondents, was the "little walk-in trade". This means, that the shopping centres/malls have the distinct advantage of passer-by clients quickly stopping by. The more accessible and visible the residential-based business, the easier this problem can be avoided.

- **Use prominent colours and information boards**

To support the previous recommendations, this should again help the visibility of the residential-based SMME and thereby, attract more attention and prospective clients.

- **Budget enough for working capital**

The costs at a residential property very much correlates with that of an individual dwelling home. There are quite a few unexpected costs and contingencies which can unexpectedly disrupt the cash flow of the business.

- **General maintenance on the property**

Again, like the previous recommendations, this could be a very nasty surprise i.r.o. the new location. At a shopping centre or any other "managed" location, the landlord/manage-ment takes care of these problems. General maintenance inside (water, electricity, plants, cleaning, etc.) and outside (gardening, plumbing, painting, etc.) should be carefully considered and also taken into consideration during budget planning (cost and time).

- **Enough parking available**

Clients should not have problems accessing the business and therefore proper parking facilities are of vital importance. If possible, a separate entrance and exit should be arranged and developed in order to ensure proper traffic flow.

If possible, suppliers should not use the same entrance than the clients, due to a more professional image and a proper flow of traffic. It is again important to consult with the

local authorities on the rights and restrictions of the business regarding parking and traffic.

- **Safety and security**

Like in any location in South Africa, this can be a problem for the SMME. Even though the results of the study did not show an unusual high crime rate at residential-based businesses, they could be a real target for crime. It is, therefore, essential to safeguard the property with the necessary security measures.

Another option to consider, is to work together in locational groups – that is to work with the other residential-based businesses in the neighbourhood and to develop a security program between the relevant parties.

- **Build good relations with neighbours**

Whether these neighbours are also small businesses or private residents, positive relations with them are essential. Especially if they are private residents – any inconvenience, noise or disturbances could relate into unnecessary problems which again could end up at the local authorities.

- **Role of employees and labour unions**

The roles and responsibilities of the employees should be made quite clear from the beginning. The new location for them also is a new experience and any doubt i.r.o. the operations of the staff, should be avoided.

The labour unions (if applicable) should also be consulted so as to ensure a highly motivated workforce with a positive moral.

- **Needs to be an expert in a variety of tasks**

The entrepreneur is almost all on his own or her at a residential-based business. There are no landlords or caretakers that can handle the secondary problems or maintenance. It is, therefore, essential to be clear-headed about this issue. More is to be expected

from the residential-based owner/manager than only the general managerial tasks of an SMME.

- **Distractions and after-hours working**

This tends to be a major problem for residential-based entrepreneurs. Family and colleagues should know, that even though it is a residential property ("home"), it is an office or business and distractions should be kept to the minimum. It is, therefore, advisable to keep the lay-out of the business strictly business-like, yet more relaxed than a normal office or store.

Because there is no mall or centre closing its doors or gates, the residential-based entrepreneur should (just like the home-based entrepreneur) know when to close the day's activities, while business hours should be adhered to.

- **Time-management and self-discipline**

The opposite of the previous statement is also true. It is recommended, that the entrepreneur should not fall into the home-based business trap of no discipline and time-management. A residential property with beautiful surroundings and swimming pools, should attract clients and not make employees unproductive.

- **Telecommute where possible**

If a few of the employees (especially accountants and employees not working with clients) could work some days as effectively from their own homes if not more, let them. Even though residential-based businesses should cut out a lot of traffic problems, it is not going to overcome traffic to the full. Telecommuting could make the SMME even more effective by having "home-based-businesses" as branches of the residential-based business ("head office").

- **High quality of service**

Though this aspect is important to all businesses, it could be the deciding factor for the residential-based business. Customers need to be so impressed with the high quality

service and personal attention, that returning is not the option, but rather how often to return and whom else to tell.

- **Professional work environment**

This last recommendation is probably one of the most important recommendations i.r.o. running a residential-based business successfully. A residential-based business needs to build that competitive edge and there is probably no better way of doing this, than to have that something extra or special at the residential property that will differentiate you from your competitors. Being at a residential property already distinguishes the SMME from other businesses and, therefore, this advantage should be exploited to the fullest.

8.5 FINAL COMMENTS

The importance of the location-decision of operating a business, is an age-old phenomenon. The old saying of "location, location and location" as the three most important aspects for a business's success and survival, holds a lot of truth. This long-term strategic decision is not only a vital decision, but also a very costly one (Simkin, 1990:83).

The SMME-environment and the location-decision of these businesses, have been thoroughly investigated and studied, and it was found that the underlying principles i.r.o. locations remain as important and vital for any business. The latest trend in this location-decision, namely the residential-based business has, therefore, been investigated and after a thorough research study, certain specific characteristics and traits of this location-decision were identified. Therefore, the researcher has contributed to the science of business management, by giving the above framework and recommendations as guidelines to prospective and current entrepreneurs as an alternative location-decision for SMME's.

8.6 LIMITATIONS OF THE STUDY

This study is a starting point for investigating residential-based businesses as an alternative location-decision for SMME's. It is thus not suggested, that the concepts, findings, conclusions and recommendations as discussed in this study, are definite and

it is acknowledged that further research is required towards addressing this subject sufficiently. Given the exploratory nature of the research, the reader should consider the following limitations of the study.

- The sample frame used in this study, concentrated on the greater Pretoria metropolitan area, and is thus important to note, that any references made in this study regarding any part of the universe, should not be seen as being representative of the population, but rather be seen in context of the sample frame used.
- More than one-third of the respondents in this study started their small business from a residential-based property and, therefore, have no previous experience of other locations. They could, therefore, not draw a proper comparison between the old and the new location-decision.
- As this study was conducted amongst South African SMME's operating under South African local authorities' rules and regulations, the results related primarily to the South African situation and should be interpreted as such.

8.7 FUTURE RESEARCH

The following several more suggestions for further research into residential-based businesses.

- A comparative study in other cities in South Africa and investigating similarities or differences between the South African situation and those of other overseas countries.
- A comparative study with each of the other SMME-locations in order to compare similarities and differences.
- A comparative study where each industry is being evaluated i.r.o. this location-decision, especially in the manufacturing industry.
- The probability of "residential-based parks" that could a long-term project initiated by this research.

REFERENCES

Adendorff, S.A. & De Wit, P.W.C. 1997. Production and operations management – a South African perspective. 2nd ed. Halfway House: International Thomson Publishing.

Alderman, L. & Cheney, K. 1997. Creating a six figure. *Money*, Nov: 148-152.

Alexander, I. 1979. Office location and public policy. Great Britain: Longman Group Limited.

Armstrong, J. & Hobbs, D. 1998. An experimental study of social and psychological aspects of teleworking. *Industrial Management & Data Systems*, 98/5: 214-218.

Atkinson, J. & Meager, N. 1994. Running to stand still: The small business in the labour market. (In Atkinson, J. & Storey, D.J., eds. *Employment, the Small Firm and the Labour Market*. London: Routledge.)

Bacon, D.C. & Mckee, B.A. 1989. Look who's working at home? *Nation's Business*, Oct. Vol. 77, 10: 20.

Bagozzi, R.P. 1994. Measurement in marketing research: basic principles of questionnaire design. (In Bagozzi, R.P. eds. *Principles of marketing research*. Cambridge: Blackwell Business.)

Bagshawe, P. 1995. Viva South African entrepreneurs – Success from humble beginnings. Musgrave: Lifespan Publications.

Barnard, J. 1997. 'n Woonhuis as beginperseel. *Entrepreneur*, Nov: 18.

Beech, W.N. 1997. Building a successful home-based business. *Black Enterprise*, September: 92-98.

Bennett, J. 1999. Home set to become the latest virtual workspace. *Business Times*, 13 June: 1.

Birch, D.L. 1981. Who creates jobs? *The Public Interest*, p.3-14.

Bisschoff, C. 1989. Strategic management. 3rd ed. USA: McGraw-Hill.

Blakely, S. 1997. Finding coverage for small businesses. *Nation's Business*, June: 30-34.

Blanchflower, D.G. & Oswald, A. 1990. What makes a young entrepreneur? *National Bureau of Economic Research*, Report No. 3252. Cambridge: Mass.

Blankenship, A.B. & Breen, G.E. 1993. State of the art marketing research. Lincolnwood: NTC Business Books.

Bolton, J.E. 1971. *Report of the Committee of Inquiry on Small Firms*. London: HMSO.

Boone, L.E. & Kurtz, D.L. 1996. Contemporary Business. 8th ed. Fort Worth: The Dryden Press.

Boulding, W., Staelin, R., Zeithaml, V. & Kaita, A. 1993. A dynamic process model of service quality: from expectations to behavioural intentions. *Journal of Market Research*, Vol. 30, February: 7-27.

Bradburd, T.M. & Ross, D.R. 1989. Can small firms find and defend strategic niches? A test of the Porter hypothesis. *Review of Economics and Statistics*, Vol. LXXI, May, No. 2, p.258-62.

Brown, C., Hamilton, J. & Medoff, J. 1990. Employers large and small. Cambridge, Mass: Harvard Univ. Press.

Browning, J.E. 1980. How to select a business site – the executive's location guide. USA: McGraw-Hill.

Burch, J.G. 1986. Entrepreneurship. New York: John Wiley & Sons, Inc.

Burns, D.J. & Warren, H.B. 1995. Need for uniqueness: shopping mall preference and choice activity. *International Journal of Retail & Distribution Management*, Vol. 23 (12): 4-12.

Carson, D., Cromie, S., McGowan, P. & Hill, J. 1995. Marketing and entrepreneurship in SMME's – An innovative approach. Hertfordshire UK: Prentice Hall.

Cassel, G. 1923. Theoretische Nationalökonomie. 3rd ed. Leipzig: W. Schall.

Caudron, S. 1992. Working at home pays off. *Personnel Journal*, Nov. 1992, Vol. 71(11): 40.

Chamberlin, E.H. 1946. The theory of monopolistic competition. 5th ed. Cambridge, Mass: Harvard University Press.

Churchill, G.A. 1992. Basic marketing research. 2nd ed. Orlando: The Dryden Press.

Churchill, G.A. 1996. Basic marketing research. 3rd ed. Orlando: The Dryden Press.

Collins Paperback Dictionary. 1995. 2nd ed. London: Harper Collins Publishers.

Cooper, D.R. & Schindler, P.S. 1998. Business research methods. Singapore: McGraw-Hill.

Courier, E.D. & Vosloo, W.B. 1994. Small & medium enterprise development and job creating growth, Vol. 10. Johannesburg: SBDC Publications.

Cromie, S. 1991. The problems experienced by young firms. *International Small Business Journal*, Vol. 9, p.43-61.

Curran, J. & Storey, D. 1993. Small firms in urban and rural locations. London: Routledge.

Czamanski, D.Z. 1981. Some considerations concerning industrial location decisions. *European Journal of Operations Research*, Vol. 6: p.227-231.

Dane, F.C. 1990. Research methods. California: Brooks/Cole Publishing Company.

De Lange, L. 1992. Hoe om 'n onderneming tuis te begin – wenke wat werk. *Finansies en Tegniek*, Vol. 44(15): 34.

Dillon, W.R., Madden, T.J. & Firtle, N.H. 1987. Marketing research in a marketing environment. Homewood: Irwin.

Dunne, P. & Hughes, A. 1989. Small business: an analysis of recent trends in their relative importance and growth performance in the United Kingdom with some European comparisons. Working Paper No. 1, Small Business Research Centre, University of Cambridge.

Ebert, R.J. & Adam, E.E. 1977. The human factor in facilities location planning. *Business Horizons*. p.35-42.

Editors of income opportunities magazine. 1990. Home business handbook. USA: Davis Publications Inc.

Egan, L. 1994. Home is where I wanna be. *Productivity SA*, March/April.

Eldib, Oe & Minoli, D. 1995. Telecommunication. Norwood, USA: Artech House, Inc.

Englander, O. 1927. Kritisches und positives zu einer allgemeinen reinen Lehre vom Standort. *Zeitschrift fur Volkswirtschaft und Sozialpolitik*, Vol. 5: 435-505.

Evans, D. & Jovanovic, B. 1989. Estimates of a model of entrepreneurial choice under liquidity constraints. *Journal of Political Economy*, Vol. 97 (4): 808-827.

Evans, D. 1987. Test of alternative theories of firm growth. *Journal of Political Economy*, Vol. 95: 657-674.

Evans, D. 1987. The relationship between firm growth, size and age: estimates for 100 manufacturing industries. *Journal of Industrial Economics*, Vol. 35: 567-581.

Fazzari, S., Hubbard, R. & Peterson, B. 1988. Financing constraints and corporate investment. *Brookings papers on economic activity*. p.141-207.

Fetter, F. 1924. The economic law of market areas. *Quarterly Journal of Economics*, Vol. 38: 520-529.

Florence, P.S. 1962. Post-war investment, location and size of plant. London: Cambridge University Press.

Gartner, W.B. 1990. What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, Vol. 5: 15-28.

Goddard, J.B. 1975. Office location in urban and regional development. Bristol: Oxford University Press.

Goffee, R. & Scase, R. 1985. Proprietorial control in family firms: some functions of quasi-organic management. *Journal of Management Studies*, Vol. 22: 53-68.

Gray, M.S., Marinen, C. & Fentel, K. 1995. Management today. New York: McGraw-Hill.

Greenhut, M.L. 1995. Plant location in theory and practice. Chapel Hill: University of North Carolina Press.

Greenhut, M.L. 1995. Location economics. Vermont: Edward Elgar Publishing Company.

Greenhut, M.L. 1996. Plant location. The University of North Carolina Press. p.98-100.

Greenwald, D. 1993. Location theory. Encyclopedia of economics. 2nd ed. McGraw-Hill. p.647-651.

Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W.C. 1995. Multivariate data analysis with readings. 4th ed. Englewood Cliffs: Prentice Hall.

Hall, B.H. 1987. The relationship between firm size and firm growth in the U.S. manufacturing sector. *Journal of Industrial Economics*, Vol. 35: 583-605.

Harz, Ns. 1985. Telecommuting – there's no place like home. *Data Management*, June, Vol. 23 (6): 10-11.

Heap, C. 1995. Leadership and teamwork in a hostile environment. Cape Town: Struik Publishers.

Holmes, W. 1913. Die Lederindustrie. Tübingen.

Hoover, E.M. 1937. Location theory and the shoe and leather industry. Cambridge, Mass: Harvard University Press.

Hotelling, H. 1929. Stability in competition. *Economic Journal*, Vol. 39: 41-57.

Hughes, A. 1991. Forthcoming concentration and the small business sector in the UK: the 1980's in historical perspective. (*In Small firms and Entrepreneurship: a global perspective*, (eds.) Acs, Z.J. & Audretsch, D.B. Cambridge: Cambridge Univ. Press.)

Hughes, A. 1991. *Building an economy*. New York: McGraw-Hill Publishing Company.

Hunker, H.L. & Wright, A.J. 1963. *Factors of industrial location in Ohio*. Columbus, Ohio: Bureau of Business Research, College of Commerce and Administration.

Income Opportunities Magazine. 1990. *Home business handbook*. New York, USA: Putnam Publishing Group.

Invernizzi, C. & Revelli, K.M. 1991. *Development of small business*. London: International Thomson Business Press.

Isard, W. 1960. *Methods of regional analysis*. Cambridge, Mass: MIT Press.

Jovanovic, B. 1982. Selection and evolution of industry. *Econometrica*, Vol. 50: 649-670.

Kaiser, T.R. 1960. *Manage our business*. Cambridge, Mass: Harvard University Press.

Karakaya, F. & Canel, C. 1998. Underlying dimensions of business location decisions. *Industrial Management & Data Systems*. MCB University Press. 98/7: 321-329.

Kilby, P. 1971. Hunting the Heffalump. *Entrepreneurship and Economic Development*.
Kilby, P. (ed.). New York: The Free Press.

Kishel, G. & Kishel, P. 1991. Start, run and profit from your own-home-based business.
USA: John Wiley & Sons Inc.

Kocher, Ce. 1993. Pinpointing the work-at-home market. *Telephony*, Feb. Vol. 224(6):
26.

Kroon, J. & Moolman, P.L. 1992. *Entrepreneurskap*. Potchefstroom: Sentrale
Publikasies.

Krzyzanowski, W. 1927. Review of the literature of the location of industries. *Journal
of Political Economics*, Vol. 35: 278-291.

Kuratko, D.F. & Hodgetts, R.M. 1998. *Entrepreneurship – A contemporary approach*.
4th ed. Fort Worth: The Dryden Press.

Lambing, P. & Kuehl, C. 1997. *Entrepreneurship*. Upper Saddle River, NJ: Prentice
Hall.

Laulajainen, R. & Stafford, H.A. 1995. *Corporate Geography – Business Location
Principles and Cases*. Dordrecht: Kluwer Academic Publishers.

Laurie, C. 1996. Home work. *Franchising World*. March/April: 18-21.

Laurie, K. 1996. *Strategic management*. Cambridge, Mass: Harvard University Press.

Levy, M. & Weitz, B.A. 1992. *Retailing Management*. Homewood, IL: Irwin Publishing.

Lewis, W.A. 1945. Competition in retail trade. *Economica*, Vol. 12: 202-234.

Lindsay, P., Stuart, R. & Thompson, J. 1993. Development of the top team: The definition of a competence framework to small and medium sized firms. Proceedings of the EFMD European Small Business Seminar, Belfast.

Linke, A. 1930. Plant location. New York: McGraw-Hill.

Lockhart, D.C. & Russo, J.R. 1994. Mail and telephone surveys in marketing research: a perspective from the field. (In: Bagozzi, R.P. (ed) 1994. Principles of marketing research. Cambridge: Blackwell Business.)

Lora, L. 1996. Marketing tips for home business. *Business Marketing*, November: 14.

Losch, A. 1938. The nature of Economic Regions. *Southern Economic Journal*, p.71-78.

Losch, A. 1944. Die Raumliche Ordnung der wirtschaft. Gustav Fischer: Jena.

Loveman, G. & Sengenberger, W. 1991. The Re-emergence of small-scale production: An international perspective. *Small Business Economics*, 3(1).

Lutgë-Smith, T. 1993. Working from home – a complete South African guide. Cape Town: Struik Publishers.

Lyons, B.R. & Bailey. 1993. Small sub-contractors in UK engineering: competitiveness, dependence and problems. *Small Business Economics*, Vol 5. No. 2, June, p.101-10.

Mahfood, Pe. 1992. Homework: how to hire, manage and monitor employees who work from home. Chicago: Probus Publishing Co.

Martins, J.H., Loubser, M. & Van Wyk, H. de J. 1996. Marketing research: a South African approach. Pretoria: Unisa Press.

Marullo, G.G. 1997. Redefining the home-office deduction. *Nation's Business*, September: 30-32.

Marx, S., Maylein, C.K. & Lombard, N. 1998. Business management. 2nd ed. Pretoria: J.L. van Schaik Publishers.

McCullough, M. 1992. The home front. *BC Business*, Feb. Vol. 20 (2):37.

Mehta, S.N. 1994. Talking at home. *The Wall Street Journal*. 14 October: 19.

Mintzberg, H. 1979. The structuring of organisations. Prentice Hall: Englewood Cliffs, NJ. p.267-87.

Moolman, P.L. 1984. Die rol van die Suid-Afrikaanse desentralisasiebeleid in die ontwikkeling van kleinsakeondernemings. Potchefstroom: PU vir CHO. (Dissertation – D.Com.)

Moolman, P.L. 1987. Kleinsakebestuur. (In Du Plessis, P.G. (red). Toegepaste Bedryfseksonomie: 'n Inleidende oorsig. Pretoria: Haum, p.699-756.)

Muller, J. 1999. SA kantoorhuur begin res van wêreld inhaal. *Finansies en Tegnies*, 27 Augustus: 38.

Muller, J. 1999. Uitsoek-kantoorruimte raak skaars. *Finansies en Tegnies*, 28 Mei: 44.

Muller, J. 1999. Winkels steeds beste belegging. *Finansies en Tegnies*, 30 April: 30.

Nel, D. 2000. Centurion Town Council. Personal interview conducted in March in Centurion, South Africa.

Nel, V. 2000. Centurion Stadsraad. Persoonlike onderhoud gevoer in Maart te Centurion.

Ntsika. 1999. State of small business in South Africa. Department of Trade and Industry – South African Government. Pretoria : Ntsika Enterprise Promotion Agency.

Nunnally, J.C. 1978. Psychometric theory. New York : McGraw-Hill Publishing Company.

O'Roarty, B., McGreal, S. & Adair, A. 1997. The impact of retailers' store selection criteria on the estimation of retail rents. *Journal of Property Valuation & Investment*, Vol. 15 (2): 119-130.

Palander, T. 1935. Beiträge zur Standortstheorie. Alqvist and Wiksell Boktryckeri: Uppsala.

Pavitt, K., Robson, M. & Townsend, J. 1987. The size distribution of innovating firms in the UK: 1945-1983. *Journal of Industrial Economics*, Vol. 45, p.297-306.

Penrose, E.T. 1959. The theory of the growth of the firm. London: Basil Blackwell.

Peters, T.J. 1982. In search of excellence – lessons from America's best-run companies. New York: Harper & Row Publishers.

Potter, R.B. 1982. The urban retail system. England: Gower Publishing Company.

Predohl, A. 1925. Das Standortproblem in der Wirtschaftstheorie. *Welt Wirtschaftliches Archiv*, Vol. 5, p.294-321.

Prendergast, G., Marss, N. & Jarrat, B. 1998. Retailers' views of shopping centres: a comparison of tenants and non-tenants. *International Journal of Retail & Distribution Management*, Vol. 26 (4): 162-171.

Putman, S.H. 1979. Urban residential location models. USA : Martinus Nijhoff Publishing.

Ritschl, H. 1927. Reine und historische dynamic des standortes der Erzeugungsweige. *Schmollers Jahrbuch for Gesetzgebung*, Vol. 51, p.813-870.

Robbins, S.P. 1992. Organisation theory. Englewood Cliffs, NJ: Prentice Hall.

Ruscoe, J. 1999. An evolutionary process. All about working from home. September: 30-31.

Russell, C. 1996. How many home workers? *American Demographics*, May, Vol, (5): 6.

Schemenner, R.W. 1979. Look beyond the obvious plant location. *Harvard Business Review*, Vol. 57, January-February: p.126-132.

Schemenner, R.W. 1982. Making business location decisions. Englewood Cliffs, NJ: Prentice-Hall.

Scherer, F.M. 1991. Changing perspectives on the firm size problem. (*In Innovation and technological change: an international comparison* (eds). Acs, Z.J. & Audretsch, D.B. p. 24-38. Ann Arbor: Univ of Michigan Press.)

Schneider, E. 1935. Bemerkungen zu einer theorie der Raumwirtschaft. *Econometrica*, Vol. 3, p.79-101.

Schumpeter, J.A. 1934. The theory of economic developing. Cambridge, Mass: Harvard University Press.

Scott, M. & Bruce, R. 1987. Five stages of growth in small business. *Long Range Planning*, Vol. 20, (3): 45-52.

Sengenberger, W., Loveman, G.W. & Piore, M.J. 1990. The re-emergence of small enterprises: industrial restructuring in industrialised countries. Geneva: International Labour Organisation.

Sexton, D.L. & Kasarda, J.D. 1996. The state of the art of entrepreneurship. Boston: PWS-Kent Publishing Company.

Sheedy, E. 1994. Start and run a profitable homes-based business – your step-by-step first-year guide. 2nd ed. North Vancouver, Canada: International Self-Counsel Press.

Simkin, L.P. 1990. Evaluating a store location. *International Journal of Retail & Distribution Management*, Vol. 18, Part 4, p.33-40.

Vosloo, W.B. 1994. Small, & medium enterprise development and job creating growth. Courier, Ed. Vol. 10. Johannesburg: SBDG Publications.

Standard Bank. 2000. Financing small business premises. SMME Business Mortgage Brochure.

Statsoft Inc. 1997. Electronic statistics textbook. [Web:] <http://www.statsoft.com/textbook/statshome.html>

Stevenson, H.H. & Gumpert, D.E. 1991. The year of entrepreneurship in Sahlman, W.A. & Stevenson, H.H. (eds.). The entrepreneurial venture. Harvard Business School: Boston, MA, p.9-25.

Storey, D.J. 1985. The problems facing new firms. *Journal of Management Studies*, Vol. 22, p.237-45).

Storey, D.J. 1994. Understanding the small business sector. New York: Routledge.

Storey, D.J. 1998. Understanding the small business sector. London: International Thomson Business Press.

Sudman, S. & Blair, E. 1998. Marketing research: a problem solving approach. Boston: McGraw-Hill.

Swart, D.J. 1998. The role and contribution of marketing management within the context of strategic management. Pretoria: University of Pretoria. (Dissertation – D.Com.)

Terblanché, N. 1998. Retail management. Halfway House, South Africa: International Thomson Publishing.

The contribution of small business to the economy. 1985. Department of Trade and Industry. Vol 4. Pretoria: Centre for small business promotion.

The President's conference on small business. 1995. Department of Trade and industry. Vol. 2. Pretoria: Centre for small business promotion.

South Africa: The White Paper on small business promotion. 1995. Department of Trade and Industry. Vol. 3. Pretoria: Centre for small business promotion.

Thisse, J.F. 1975. Contribution a la theorie microeconomique spatiale. Ph.D. Dissertation. University of Liege, Belgium.

Thurstone, L.L. 1931. Multiple factor analysis. *Psychological Review*, Vol. 38: 406-427.

Timmons, J.A. 1994. New venture creation – entrepreneurship for the 21st century. 4th ed. Illinois: Irwin.

Trochim, W.M.K. 1997. The knowledge base: an online research method's textbook. [Web:] <http://trochim.human.cornell.edu/kb/kbhome.html>.

Van Aardt, I. & Van Aardt, C. 1997. Entrepreneurship and new venture management. Southern Africa: International Thomson Publishing.

Van den Berg, T.J. 1983. Die aard, omvang en impak van woonhuiskantore in Pretoria. Verhandeling van Magister en Stads- en Streeksbeplanning in die Fakulteit Ingenieurswese aan die Universiteit van Pretoria.

Van Vuuren, J.J. & Nieman, G.H. 1999. Entrepreneurship education and training: a model for syllabi/curriculum development. (*In* 44th ICSB World Conference STET., eds. Capaldo, G. & Raffa, M. 9th ed. Napoli: Edizioni Scientifiche Italiane.)

Verchuren, A. 1998. Land Use Rights department. Personal interview conducted in September.

Weber, A. 1928. Theory of location. Trans. by C.J. Friedrich. Chicago: University of Chicago Press.

White, J.R. & Gray, K.D. 1996. Shopping centres and other retail properties. Canada: John Wiley & Sons.

South Africa: White Paper on national strategy for the development and promotion of small business in South Africa. 1995. *Government Gazette*, Vol. 357. Cape Town: Parliament of the Republic of South Africa.

Wickham, P.A. 1998. Strategic entrepreneurship – a decision-making approach to new venture creation and management. London: Pitman Publishing.

Wynarczyk, P. Watson, R., Storey, D.J., Short, H. & Keasey, K. 1993. The managerial labour market in small and medium sized enterprises. London: Routledge.

Zimmerer, T.W. & Scarborough, N.M. 1996. Entrepreneurship and new venture formation. New Jersey: Prentice-Hall International, Inc.

APPENDIX A

PRELIMINARY QUESTIONNAIRE

RESIDENTIAL-BASED BUSINESS

PRELIMINARY RESEARCH QUESTIONNAIRE

Dear Entrepreneur

The following questionnaire is seen as a preliminary questionnaire to finalise the research questionnaire on residential-based businesses. We will appreciate it if you would complete it as thoroughly as possible. All information will be treated as being confidential and will be used only for academic purposes.

Thank you.

Lydia Ntshingila

Instructions for completion

1. Please answer all questions in Section A by writing in the spaces provided.

SECTION A

Question 1

What specific businesses are you currently operating and where?

Question 2

Indicate what factors were reasons for operating your business from home/residential property.

Question 3

Was your business previously situated in a shopping centre/shopping mall/city centre/office block? If so, indicate where and for how long.

.....
.....

Question 4

If your answer to question 3 was affirmative, what influenced your decision to move to a residential-based business?

Management

Landlords

Rules/regulations

Rental

Other

.....

.....

Question 5

If applicable, how are your growth figures (sales/customers) now comparing with your growth in the shopping centre/mall/office etc?

.....
.....

Question 6

How do the local authority's rules and regulations influence your residential-based business? (positive/negative and why?)

Positive:

Negative:

Question 7

What specific rules and regulations of the local authority do you not agree with and how would you change them?

.....

.....

.....

.....

Question 8

Are you satisfied with the well-being of your business being located at a residential property? If yes/no – why?

.....

.....

.....

Question 9

What benefits have you derived from this location-decision?

.....

.....

.....

Question 10

What disadvantages are you experiencing from this location-decision?

.....

.....

*THANK YOU VERY MUCH FOR YOUR CO-OPERATION IN COMPLETING THIS
SURVEY*

APPENDIX B
QUESTIONNAIRE

UNIVERSITY OF POTCHEFSTROOM

v1

1-3

RESIDENTIAL-BASED BUSINESS RESEARCH QUESTIONNAIRE

Dear Owner/Manager

The following questionnaire is part of an extensive research study undertaken to investigate the phenomenon of residential-based business as alternative location for small business enterprises. It will be appreciated if you would complete it as thoroughly as possible. All information will be treated as confidential and will only be used for academic purposes.

Thank you very much

Lydia Ntshingila

Instructions for completion:

1. Please answer all questions regarding your business as honest and objective as possible.
2. Place a tick or a cross in the space provided which reflects your answer the most accurately with each of the questions.
3. Where asked for comments or to specify, please keep these as briefly, but yet thoroughly, as possible.

SECTION A BIOGRAPHICAL INFORMATION

1. Sex

1.1 Male	
1.2 Female	

v2

4

2. Age

2.1	- 19	
2.2	20 - 29	
2.3	30 - 39	
2.4	40 - 49	
2.5	50 - above	

v3

5

3. **Highest educational qualification?**
(If certificate, diploma or degree, please state field of specialisation)

.....

v4

6	
---	--

4. **Your position in the business?**

4.1 Owner	
4.2 Manager	
4.3 Owner and Manager	
4.4 Other (Specify)	
.....	

v5

7	
---	--

SECTION B OWNERSHIP INFORMATION

5. **Form of residential-based business?**

5.1 Sole proprietor	
5.2 Partnership	
5.3 Close corporation	
5.4 Private company	
5.5 Public company	
5.6 Other (specify)	
.....	

v6

8	
---	--

6. **In what sector (choose only ONE) according to the Standard Industrial Classification would you classify your residential-based business?**

6.1 Agriculture	
6.2 Mining and quarrying	
6.3 Manufacturing	
6.4 Electricity, gas and water	
6.5 Construction	
6.6 Retail and motor trade and repair services	
6.7 Wholesale trade, commercial agents and allied services	
6.8 Catering, accommodation and other trade	
6.9 Transport, storage and communications	
6.10 Finance and business services	
6.11 Community, social and personal services	
6.12 Other (specify)	
.....	

v7

9	
10	

7. In your own words, describe what kind of small business you are operating?

.....
 v8
 11

8. Your amount of total full-time employees is:

8.1 20 or more	
8.2 15 – 19	
8.3 10 – 14	
8.4 5 – 9	
8.5 1– 4	

v9
 12

9. You total annual turnover is:

9.1 Less than R150 000	
9.2 R150 001 – R500 000	
9.3 R500 001 – R1 000 000	
9.4 R1 000 001 – R2 000 000	
9.5 R2 000 001 or more	

v10
 13

SECTION C LOCATION CHARACTERISTICS

10. Do your own or rent the current property where doing business?

10.1 Own	
10.2 Rent	

v11
 14

11. Has the property been rezoned for business purposes?

11.1 Yes	
11.2 No	

v12
 15

12. Before your current location of your business, where were you previously located?

12.1 Nowhere – start business from home	
12.2 Shopping mall	
12.3 Shopping centre	
12.4 Office block	
12.5 Suburban shopping centre	
12.6 Other (specify)	
.....	

v13
 16

13. Please indicate (on a 5 point scale) to what extent the factors below might have been REASONS/ADVANTAGES for operating from a "residential" property. Please mark every statement whether it applies or not.

Factor	None at all 1	2	3	4	Very much 5			
13.1 Much more cost-effective at home						v14	17	
13.2 Too expensive at a mall, centre or office block						v15	18	
13.3 Rent too high elsewhere						v16	19	
13.4 Too much rules and regulations						v17	20	
13.5 To be closer to my family						v18	21	
13.6 More safety and security regarding crime						v19	22	
13.7 Higher net profits because of less fixed costs						v20	23	
13.8 Optimal use of property/facilities available						v21	24	
13.9 Long-term planning for retirement						v22	25	
13.10 Easier expansion in future (more space)						v23	26	
13.11 Easier and better parking facilities for clients (more accessible)						v24	27	
13.12 Choice of better area and suburb						v25	28	
13.13 More business and growth opportunities						v26	29	
13.14 Lower capital lay-out						v27	30	
13.15 Attitude of management/ landlords at previous location						v28	31	
13.16 To start a second job from home for higher income						v29	32	
13.17 Operations can be done more effectively from home						v30	33	
13.18 To benefit from tax advantages						v31	34	
13.19 Create your own work environment						v32	35	
13.20 Better productivity and time-management						v33	36	
13.21 Less stress						v34	37	
13.22 Avoiding rush hour traffic						v35	38	
13.23 Greater flexibility for my personal family live						v36	39	

14. Please indicate (on a 5 point scale) to what extent the factors below can be seen as **PROBLEMS/DIFFICULTIES/DISADVANTAGES** of a residential-based business. Please mark every statement whether it applies or not.

Factor	None at all 1	2	3	4	Very much 5			
14.1 Monetary and capital risk						v37	40	
14.2 More pressure to perform						v38	41	
14.3 Need to be an expert in a variety of tasks						v39	42	
14.4 Difficult to leave work behind (going into after-hours)						v40	43	
14.5 Irregular income						v41	44	
14.6 Loneliness and isolation						v42	45	
14.7 Motivation difficulties						v43	46	
14.8 General disruptions (children, friends etc.)						v44	47	
14.9 Insurance and liability						v45	48	
14.10 Application for consent and business rights						v46	49	
14.11 Labour relations and personnel aspects						v47	50	
14.12 Marketing and advertising						v48	51	
14.13 Local authority regulations						v49	52	

15. How are your growth figures (regarding **SALES/TURNOVER**) compared to your previous location?

15.1 Worse than before	
15.2 The same than before	
15.3 Better – between 0-25%	
15.4 Better – between 26-50%	
15.5 Better – higher than 51%	
15.6 No previous location	

v50	
53	

16. How are your growth figures (regarding CUSTOMERS/FOOTSTEPS) compared to your previous location?

16.1 Worse than before	
16.2 The same than before	
16.3 Better – between 0-25%	
16.4 Better – between 26-50%	
16.5 Better – higher than 51%	
16.6 No previous location	

v51	
54	

17. What specific other ADVANTAGES have you derived from this location-decision?

.....

v52

55-56		
-------	--	--

18. What specific other DISADVANTAGES are you experiencing from this location-decision?

.....

v53

57-58		
-------	--	--

19. What specific ACTIONS and RECOMMENDATIONS can you suggest to ensure a proper and successful residential-based business?

.....

v54

59-60		
-------	--	--

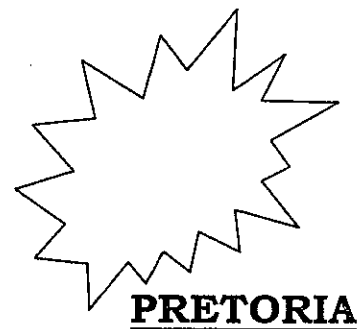
THANK YOU VERY MUCH FOR YOUR CO-OPERATION IN COMPLETING THIS SURVEY

APPENDIX C

**MANUAL OF APPLICATION FOR CONSENT FOR A HOME
UNDERTAKING**

MANUAL

Application for consent for a Home Undertaking



STADSRAAD VAN PRETORIA

CITY COUNCIL OF PRETORIA

MANUAL FOR AN APPLICATION FOR CONSENT FOR A HOME UNDERTAKING

Please note that it is in the applicant's best interest to consult with the applicable council town planner, before attempting to lodge an application (as set out in this manual) in order to avoid being in possible conflict with existing Council policy in that area.

1. GENERAL INFORMATION

1.1 BACKGROUND

The written consent of the City Council is required in terms of Schedule IX of the Pretoria Town-Planning Scheme, 1974 for a Home Undertaking in the following cases only:

- a) Where a Second Bona-fide occupant also wishes to operate a Home Undertaking;
- b) To exceed the prescribed 60m² gross floor area limit of the Home Undertaking;
- c) To operate a Shop or Restricted Industry. (As defined in the Pretoria town-Planning Scheme, 1974.)

1.2 APPLICATIONS

Every application in any of the above cases is divided into two parts and the documentation for each part must be handed in at Land Use Rights, Ground floor, Munitoria, cnr Vermeulen and v/d Walt Streets, Pretoria or posted to the Executive Director: City Planning and Development Department, Division Land-use Rights, PO Box 3242, Pretoria, 0001, as prescribed hereunder:

1.2.1 Part A – the following must be handed in at the aforementioned address at least one day prior to the first day that the placard notice appears on the erf:

- a) Application fee of R330,00 (cheques must be made out to the City Council of Pretoria – note post-dated cheques will not be accepted).
- b) Application form and motivation (see pages 7 – 9) properly filled in (16 copies).
- c) Covering letter (2 copies).
- d) Annexures which consist of the following:
 - i) Locality plan (see paragraph 1.3 and Example 1) (16 copies).
 - ii) Title Deed or Deed of Transfer (2 copies).
 - iii) Plan of the dwelling place (see paragraph 1.4 and Example 2) (16 copies).
 - iv) Objection notices completed and signed by all relevant neighbours and/or controlling body (see Example 3 attached hereto).
 - v) Special Power of Attorney (only in cases where someone applies on behalf of the person wishing to operate the Home Undertaking).

1.2.2 Part B – the following must be handed in at the above address not earlier than 28 days or later than 56 days from the first day that the placard notice appeared on the erf:

- a) Photo's of the placard notice as proof of the display thereof (see paragraph 1 and 1.7).
- b) Sworn affidavit or confirming that the placard was displayed and maintained for three weeks (see Example 4 attached hereto).
- c) Objections to the application (originals only).
- d) The applicant's reply on the objections, if applicable.
- e) Written confirmation that no objections were received, if applicable.

1.3 LOCALITY PLAN

A locality plan (A4 size) to scale of 1:5000, with the relevant erf in the centre (obtainable at the Land Surveyors, Ground floor, Munitoria, cnr Vermeulen and v/d Walt Streets, Pretoria) must be handed in (see Example 1 attached hereto).

1.4 PLAN OF DWELLING PLACE (see Example 2)

1.4.1 If the Home Undertaking is exercised within a Dwelling-house, Duplex unit or Group Housing unit, then the following must be provided:

- a) A single line drawing to a scale of 1:200 showing the erf boundaries, the placing of the buildings, carports, parking plans and the details on the erf with the gross floor areas of the main building and the outbuildings, the north point, erf numbers of adjacent erven, street name and number and the parking space of the vehicle used for the Home Undertaking (see page 5 paragraph A(f) hereof).
- b) Indicate on the plan which portion of the dwelling place is to be used for the Home Undertaking and the total floor area (m²) of this portion.

1.4.2 If the Home Undertaking is to be exercised in a flat, boarding house room, Retirement Centre or other similar type of dwelling-place which does not fall under 1.4.1 above, then the following must be provided:

- a) A single line drawing to a scale of 1:200 showing the outside dimensions of the relevant dwelling place and adjacent dwelling places.
- b) Indicate all the rooms in the dwelling place and the specific area to be used for the Home Undertaking as well as the square meterage of this area.

1.5 MOTIVATION

Aspects that must be covered in the application form are the following

- a) The specific activities to be exercised.
- b) How many clients are expected everyday?

- c) The reasons for an area larger than 60 m², if applicable
- d) Any potential disturbances to neighbours and how this will be minimized.
- e) The times and number of deliveries of items resulting from the Home Undertaking.

1.6 NOTIFICATION

1.6.1 Where the Home Undertaking is to be exercised within a Dwelling-house, Duplex or Group Housing unit, then the following methods of notification must be adhered to:

- a) A placard notice (see paragraph 1.7) that is clearly visible and legible must be erected on each street boundary of the erf and maintained in such position for a minimum of 3 weeks;
- b) A copy of the Application Notice as set out in Example 3 must be handed to the surrounding neighbours, as shown in the diagrams below. The completed and signed notices must then be handed into the City Council at the above address;
- c) In the case where a controlling body exists, the Application Notice must also be completed and signed by such a body and handed in to the City Council at the above address.

The diagrams on the following page indicate which neighbours of surrounding erven must be informed of the proposed application by means of the attached notice (Example 3).

(Erf marked A indicates the application erf.)

(Erven marked X indicates the neighbours that must be notified.)

	X	X	X
STREET			
	X	A	X
	X	X	X

MIDDLE OF BLOCK

		X	X	X	X
STREET					X
		X	A		
		X	X		X
					X

CORNER APPLICATION

OR

1.6.2 If the Home Undertaking is to be exercised in a Flat, Boarding House room, Retirement Centre or similar type of dwelling-place which does not fall under 1.6.1 above, then the following methods of notification must be adhered to:

- a) A placard notice (see paragraph 1.7) that is visible and legible must be placed in the entrance hall to the building and maintained in such place for a minimum of 3 weeks;
- b) A copy of the Application Notice as set out in Example 3 must be handed to each occupant of the adjacent dwelling places (horizontal and vertical). The completed and signed notices must then be handed in to the City Council at the above address; and
- c) In the case where a controlling body exists, the Application Notice must also be completed and signed by such a body and handed in to the City Council at the above address.

1.7 PLACARD NOTICE

The placard notice shall indicate the following information in both English and Afrikaans:

- a) Name of the Applicant, the Property description, Street address where the Home Undertaking will be exercised, the postal address and, where available, the telephone number of the Applicant;
- b) The type of Home Undertaking and the purpose of the application; and
- c) The address where objections must be handed in and the closing date of objections.

Placard notices drawn up according to legal requirements can be purchased at Land Use Rights, Ground floor, Munitoria, cnr Vermeulen van v/d Walt Streets, Pretoria.

1.8 PHOTO'S

1.8.1 Where the Home Undertaking is to be exercised within the Dwelling-house, Duplex or Group Housing unit, then two photos of each placard notice, not smaller than a postcard size, must be provided as follows:

- a) One close up photo of the placard so that the wording is legible; and
- b) One photo of the placard from across the street to indicate the visibility of the notice.

1.8.2 Where the Home Undertaking is to be exercised in Flat, Boarding House room, Retirement Centre or similar type of dwelling place which does not fall under 1.8.1 above, then 2 photos of the placard notice, not smaller than a postcard size, must be provided as follows:

- a) One close-up photo of the placard so that the wording is legible; and
- b) One photo of the placard to indicate its visibility in the entrance hall to the building.

SCHEDULE IX
HOME UNDERTAKINGS

(Conditions governing Home Undertakings in use zones I, II, III, IV, V, VI, IX and XIII)

1. With respect to a dwelling-place, but apart from the exceptions mentioned under Paragraphs 3 and 4, a home undertaking is restricted to -
 - (1) Only one bona fide occupant or, with the written consent of the City Council, two bona fide occupants;
 - (2) A maximum of 30% of the gross floor area of the dwelling-place, provided that without the written consent of the City council such area shall not exceed 60 m²;
 - (3) The display of one notice board with maximum dimensions of 460 mm x 600 mm showing only the name(s) of the occupant(s) intended in paragraph (1) hereof, the address and the telephone number and the nature of the home undertaking:
(14.06.95/1316/4448)
 - (4) The storage of goods of whatever nature, reasonably essential for such home undertaking, within the area contemplated in paragraph 92) hereof;
 - (5) The display of goods contemplated in paragraph (4) hereof in such a way inside the dwelling-place that it is not visible from the outside;
 - (6) The loading and off-loading of goods contemplated in paragraph (4) hereof by means of a private motor vehicle or commercial vehicle with a mass not exceeding 3 500 kg (loading capacity included) and a maximum length, width and height of 5,500 m, 1,800 m and 2 100 me respectively, and of which only one such vehicle may be parked regularly at the dwelling-place out of sight from the street.
 - (7) Crèches, where a maximum of 12 preschool children are cared for, without compulsory educational standards:

Provided that -
 - (i) The health and safety requirements of the Council shall be complied with,
 - (ii) No activities shall be held on weekdays after 17:30, or on Saturdays, Sundays or public holidays,
 - (iii) An acoustically-acceptable screen wall of at least 1.8 m high shall be erected on the property boundary, where the play area abuts the living-room/living-rooms of an adjoining dwelling place, to the satisfaction of the Council. (19.07.95/1665/4210)
2. One parking space per 25 m² or portion thereof of the area referred to in paragraph 1(2) hereof shall be provided on the property.
3. Only in the case of a dwelling-house may a maximum of two persons be employed.
4. Noxious Industries and Industries are not permitted.
5. No disturbance or pollution through noise, smell, dust, radio-activity, gasses or vibrations or other offensive conditions, which results in inconvenience to the public, is permitted.

6. The following activities are not permitted in any dwelling-place:

- (1) A funeral undertaking; a visitors' information bureau; a building society agency; a bank agency; kennels, an escort agency; a tow-in service; an institution; a motor workshop; a car wash; a place of instruction for more than six persons; a panel-beater; a parcel delivery service; a radio control/telephone exchange; a travel agency; a shooting range; a blasting contractor; a butcher; a spray-painter; a taxi business; a pet salon; a fish-fryer; hiring and selling of vehicles; a place of amusement; manufacturing of concrete products; a packaging contractor; a place of refreshment and a transport undertaking. (16.06.95/1316/4448)
- (2) Shops and Restricted Industries, except with the written consent of the City Council.

(27.03.91/1212/3609/P)

DEFINITIONS

1. HOME UNDERTAKING means the practice of an activity at a Dwelling-place with the aim of deriving and income therefrom.
2. DWELLING-PLACE means a "Dwellinghouse", "Flat", "Duplex dwelling", "Dwelling-unit" and "Tenement", including the ancillary outbuildings, as well as a habitable room in a hotel, boarding house or retirement centre.
3. GROSS FLOOR AREA of the Dwelling Place means the total floor area of all the existing buildings and proposed buildings that are used or to be used for residential purposes and that which is used directly with the dwelling-place for associated purposes.

Compiled by: the Department City Planning and Development
Land-use Rights Division
May, 1992 (revised July 1992, September 1994, May 1998)

HOMEUND.MAN
A.C. WALKER/LJ/DUP
JULY 1992

APPLICATION FORM FOR HOME-UNDERTAKING

1. **PROPERTY DESCRIPTION** : _____
(According to title deed) _____
2. **STREET ADDRESS** : _____

3. **APPLICANT DETAILS**
- 3.1 Name and surname : _____
- 3.2 Postal address : _____

- 3.3 **TELEPHONE** : _____ (W) _____ (H)
4. **TITLE DEED NUMBER** : _____
5. **REGISTERED OWNER/S** : _____

6. **SIZE OF PROPERTY** : _____
7. **EXISTING ZONING** : _____
8. **REQUESTED USE** : _____
(for home-undertaking)
9. **AREA OF MAIN BUILDING:** (Existing) _____ m² (New) _____ m²
10. **AREA OF OUTBUILDINGS:** (Existing) _____ m² (New) _____ m²
11. **AREA USED FOR UNDERTAKING:**
(Main building) _____ m² (Outbuildings) _____ m²
- Is parking available on the erf? (Yes/no) _____
- If yes, how many parking spaces are available? _____

12. **OCCUPATION OF RELEVANT PROPERTY BY APPLICANT**

(permanent/temporary): _____

13. **OWNERHIP**

(Full-partial owner, sectional title owner or tenant of the dwelling-place):

14. **DESCRIPTION OF DWELLING-PLACE:** (Dwelling-house/Duplex/Flat/Room e.g. in boarding establishment/hotelroom/Retirement centre/Other:

15. **DESCRIPTION OF HOME-UNDERTAKING:**

15.1 **ACTIVITIES:**

(Describe the activities of the home-undertaking):

(indoors) _____

(outdoors) _____

15.2 **MACHINERY:** (Describe possible appliances and/or machinery stating the power consumption and placing thereof in the area where the undertaking is practised):

15.3 **NUISANCE:** (Describe how any noise, smell, dust or other troublesome condition which could result in public inconvenience, can be eliminated):

15.4 **WORKING HOURS:**

WEEK DAYS: _____

SUNDAYS: _____

RELIGIOUS PUBLIC HOLIDAYS: _____

15.5 **VEHICLE** (if applicable)

What type of vehicle is used for the undertaking (see the restrictions in terms of Schedule IX Section A)?

(Vehicle mass) _____ kg (Loading capacity) _____ kg

Main dimensions: (length) _____ m (width) _____ m (height) _____ m

Vehicle type: (LDV/truck/delivery van/other) _____

Parking: where is the vehicle normally parked on the premises?

(Indicate on the above-mentioned sketch (see paragraph 1.4).

15.6 **MOTIVATION:** (See paragraph 1.5. If the space below is insufficient attach additional pages to the application form)

SIGNED

DATE

NAME IN PRINT

EXAMPLE 1

EXAMPLE 3

APPLICATION NOTICE
PRETORIA TOWN-PLANNING SCHEME, 1974

In terms of Schedule IX of the Pretoria Town-planning Scheme, 1974, you are hereby informed that

I (full name)

intend applying to the Pretoria City Council for consent to exercise a "home undertaking" namely

(give a short description)

on (erf no and township)

also known as (street name and no)

Business hours: Week days

Sundays

Public Holidays

Number of persons involved: Floor area used: m²

Machines used:

Applicant's address:

Telephone no: Home: Work:

Any objection to the above application with the reasons therefore, must be set out in writing in a separate letter and shall be lodged with or made in writing to: the Executive Director: City Planning and Development, Land-use Rights Division, Ground floor, Munitoria, cnr Vermeulen and v/d Walt Streets, Pretoria, or posted to PO Box 3242, Pretoria, 0001. Full particulars and plans (if any) may be inspected during normal office hours at the above-mentioned office, during the above-mentioned period.

The closing date for submission of any objection is:

STATEMENT:

I, (full name)

Being the *owner/occupant/lessee of the property on (erf no and township)

Declare that I have *any objection/no objection to the above application

Signed: Witness:

Date: Place:

*delete whichever is not applicable

EXAMPLE 4

AFFIDAVID/DECLARATION

TO WHOM IT MAY CONCERN:

I, the undersigned, (full name)

.....
*hereby declare under oath/*hereby confirm that the placard notice as prescribed in terms of
Schedule IX of the Pretoria Town-planning Scheme, 1974,
on *erf/holding/farm portion No

*township/holdings/farm

Was displayed and maintained in a conspicuous and to the public accessible position,

From/...../19....., for a period of 21 days to/...../19.....

SIGNED: ON:/...../19.....

(Signature of applicant)

AT:

I certify that the declarant acknowledges at *he/she is conversant with this declaration and
understands it, and that the declarant uttered the following words: "I swear that the contents of this
declaration are the truth and nothing but the truth, so help me God".

COMMISSIONER OF OATHS:

DATE:

*Delete what is not applicable.

Homeund.man/dup

TAKE NOTE:

This declaration must be handed in **only after** the required period for the display and maintenance
of the placard notice has expired. The day upon which the advertisement was published in the
provincial Gazette, as well as any possible following public holidays thereafter, must not be counted
in the calculation of the 21 day period. In the event of this declaration being incorrectly
completed/signed and/or handed in too early, the Council will view such a declaration as a false
declaration.

In the aforementioned case it shall be required from the applicant to comply with the
prescribed advertisement/procedure anew. Legal prosecution of he applicant shall possibly
also be considered.



SPECIAL POWER OF ATTORNEY

I/We, the undersigned

JOE PUBLIC, ID. No. 0001 0001 00010

Do hereby nominate, constitute and appoint

JAMES ANYBODY, ID. No. 0002 0002 00020

with power of Substitution, to be my/our lawful attorney(s) and agent(s) in my/our name, place and stead to apply for

The consent of the City Council of Pretoria, for the erection of a second dwelling on Erf 1, Pretoria, also known as 65 Botha Street, Pretoria

And generally for effecting the purposes aforesaid, to do or cause to be done whatsoever shall be requisite, as fully and effectually, for all intents and purposes, as I/we might or could do if personally present and acting herein- hereby ratifying, allowing and confirming and promising and agreeing to ratify, allow and confirm all and whatsoever my/or said Attorney(s) and Agent(s) shall lawfully do, or cause to be done, by virtue of these presents.

Signed at PRETORIA

On this 14th day of OCTOBER 19 93

in the presence of the undersigned witnesses.

AS WITNESSES:

1. PSSMIT

JOE Public
JOE PUBLIEK

2. *CR Botha*