

THE IMPACT OF HIGH TELECOMMUNICATIONS
COSTS ON THE CALLCENTRE INDUSTRY IN
CAPE TOWN, SOUTH AFRICA

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**The impact of high Telecommunications
costs on the callcentre industry in Cape
Town, South Africa.**

By

Robson Mpande Ngobeni

A minithesis submitted in partial fulfilment of the requirements for
the degree of Magister Technologiae in the Department of
Business Administration,
Cape Peninsula University of Technology.

Supervisor: Daniel De Goede

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Declaration

I, the undersigned, declare that this dissertation is my own aided work. It is submitted for the degree Magister Technologiae in Business Administration at the Cape Peninsula University of Technology. It has not been submitted before for any other degree or examination at any other University, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Robson Mpande Ngobeni

20 July 2009

Signed:

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And to everyone else who assisted me in one way or another, I highly appreciate it. God bless you.

ABSTRACT

This study provides a comprehensive overview of challenges and obstacles that are caused by high telecommunications costs within the callcentre industry in Cape Town, South Africa. This study couldn't have come at a better time considering the current turbulent economic circumstances around the world. The study focuses on key areas such as, growth, profitability, employment creation and sustainability of callcentres.

In order to fulfil research requirements, primary data was collected by using a quantitative data collection approach in the form of questionnaires and interviews.

Results indicate that the biggest obstacle to growth within the callcentre industry in the Western Cape, is high telecommunications costs.

The study recommends that our Government should intervene through its communications departments as means to reduce current telecommunications costs. Callcentres should also explore use of new telecommunications technology, namely VoIP.

A solution to the high telecommunications costs will not only benefit the callcentre industry but the entire country through foreign direct investments, job creation and poverty alleviation. This will result into true empowerment of our society.

List of Keywords:

- High telecommunications costs;
- City of Cape Town;
- Callcentre growth;
- Callcentre profitability;
- Callcentre sustainability;
- Callcentre employment creation;
- Callcentre operation costs;
- Voice Over Internet Protocol; and
- ICASA.

TABLE OF CONTENTS**PAGE**

CHAPTER 1: INTRODUCTION	8
1.1 BACKGROUND AND MOTIVATION	8
1.2 PROBLEM STATEMENT	9
1.3 RESEARCH QUESTION	10
1.4 RESEARCH OBJECTIVES	10
1.5 SIGNIFICANCE OF THE RESEARCH	11
1.6 DELINEATION OF THE RESEARCH	12
1.7 RESEARCH DESIGN AND METHODOLOGY	12
1.8 Limitations	12
1.9 Sampling	12
1.10 Data collection	13
1.11 Data analysis	13
1.12 Hypothesis.....	14
1.13 OUTLINE OF CHAPTERS.....	14
CHAPTER 2: LITERATURE REVIEW	16
2.1 Introduction.....	16
2.2 Literature review	16
2.3 Summary	21
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY	22
3.1 Introduction.....	22
3.2 Research Design.....	22
3.3 Research Methodology.....	23
3.3.1 Limitations	23
3.3.2 Sampling	23
3.3.4 Data collection	24
3.3.5 Data analysis	25
3.3.6 Reliability and Validity of Data	26
3.3.6 Hypothesis.....	26
3.4 Summary	28

CHAPTER 4: RESULTS AND DISCUSSIONS.....	30
4.1 Introduction	30
4.2 Market analysis	30
4.2.1 Market breakdown	30
4.2.2 Operating hours	32
4.2.3 Efficiency of callcentre agents	33
4.2.4 Preferred Technology.....	34
4.3 High telecommunications costs slow down growth of the callcentre industry in Cape Town, South Africa.....	35
4.3.1 Factors affecting growth of callcentres	35
4.3.2 Government contribution	36
4.3.3 Foreign Direct Investment.....	38
4.4 Telecommunications costs make up largest percentage of operational costs in a callcentre.	39
4.5 High telecommunications costs directly affect the number of agents that a callcentre can employ.....	41
4.6 High telecommunications costs have caused several callcentres to close within two years of operations.	43
4.7 Summary	44
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	45
5.1 Introduction	45
5.1.1 Market breakdown	45
5.1.2 Operating hours.....	45
5.1.3 Efficiency of callcentre agents	46
5.1.4 Government contribution	46
5.1.5 Foreign Direct Investment.....	46
5.1.6 Telecommunications costs constitute largest percentage of operational costs in a callcentre	46
5.1.7 High telecommunications costs directly affect the number of agents that a callcentre can employ.....	47
5.1.8 High telecommunications costs have caused several callcentres to close down within two years of operation.....	47
5.1.9 Technology Conclusions.....	47

5.2 Recommendations	48
5.2.1 Market breakdown	48
5.2.2 Operating hours	48
5.2.3 Efficiency of callcentre agents	48
5.2.4 Government contributions.....	49
5.2.5 Foreign Direct Investment.....	49
5.2.6 Telecommunications costs make up largest percentage of operational costs in a callcentre	50
5.2.7 High telecommunications costs directly affect number of agents that a callcentre can employ	50
5.2.8 High telecommunications costs have caused several callcentres to close within two years of operation	50
5.2.9 Technology Recommendations	51
5.3 Conclusion.....	56
REFERENCE LIST	57
GLOSSARY OF TERMS	60
Appendix A	63

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND AND MOTIVATION

The South African Government launched a campaign in 1998 to create a suitable and conducive environment for the callcentre industry within South Africa.

According to a 2006/2007 key indicator report by *Deloitte* and *Calling the Cape*, which is a body that works to promote Cape Town as a callcentre hub in SA, the callcentre industry employs around 100 000 people in South Africa, and has potential to grow even further. Several companies have become customer centric and are doing all they can to improve their levels of customer service. Effective and efficient communication channels between companies and their customers, include callcentres, newspapers and the Internet. However with the amount of computers in circulation in South Africa, the Internet choice is limited, which renders callcentres and newspapers preferred channels.

The *Cape Argus* (17 January 2007) reported that European and American companies are taking their callcentre businesses offshore, which saves them capital in set-up costs and salaries. Countries that regularly receive outsource callcentres include but are not limited to India, South Africa, Malaysia and Egypt. South Africa has an edge over its competitors because of their effective infrastructure, good command of English language, sound business policies, cultural diversity and stable political environment.

A survey by *Deloitte* (2007) states that Cape Town's callcentre and business process outsourcing industry has grown by 30% annually for the past three years and can probably sustain this momentum as more foreign firms award contracts to local players, and the industry employs 22 000 people in Cape Town, which is 41% up from 2005.

Calling the Cape believes that the industry offers South Africa opportunities to create an high number of jobs for particularly young, previously disadvantaged

people, as long as it is supported by efforts to encourage more investments and to grow the talent pool.

The sectors 200 active players already generate between R2,5bn to R3,3bn a year, which accounted for 2,4% of the Western Cape's income in 2006 and created 3% of formal employment in Cape Town.

The number of companies that serve overseas clients has grown rapidly from 12 in 2004 to 26 in 2007. Nearly 2 500 agents or 15% of the total agents service exclusively offshore clients. This is a positive sign that shows investor confidence in South Africa.

The biggest challenge for South Africa is high telephone and technology costs. For an outbound callcentre that engages in offshore and local telesales or telemarketing, telephone and technology costs are high, which results in high operations costs, which in turn affects profitability and growth. However, the Government through its department of communications, has attempted to address this high telecommunications costs problem. Results are however not forthcoming.

The biggest land line telecommunications operator in South Africa is Telkom, which is 50 % owned by the Government; they also have 50% ownership of the biggest local mobile network operator, Vodacom. This creates a monopoly environment and makes it difficult to address pricing issues. The Government receives the bigger piece of the pie when dividends are declared at the end of each year, which makes them the biggest beneficiary of the high telecommunications costs.

1.2 PROBLEM STATEMENT

South Africa is in the process of establishing itself as a callcentre investment destination for the developed world, namely countries such as United Kingdom, United States of America (USA) and Germany. A rationale for this includes reasonable labour costs, stable political environment, good use of English, and world class infrastructure.

According to media reports this investment drive is diverted to other developing countries such as India, Indonesia, the Philippines and Egypt. The question is; what impact does high telecommunications costs have on competitiveness of the callcentre industry in South Africa in relation to other developing countries?

1.3 RESEARCH QUESTION

Based on the above background, the following question was formulated for this research study:

What is the impact of high telecommunications costs on the callcentre industry in Cape Town, South Africa?

1.4 RESEARCH OBJECTIVES

The purpose of this research is to achieve the following outcomes:

- To provide a comprehensive overview of the challenges and obstacles, which are caused by high telecommunications costs within the callcentre industry in Cape Town.
- To focus on key areas such as growth, profitability, employment creation, and sustainability.
- To provide possible solutions to the above mentioned challenges and obstacles.

1.4 Growth

- How does high telecommunications costs affect callcentres growth?
- How do high operational costs limit local callcentres from exploring offshore opportunities?

1.4.1 Profitability

- What revenue value is placed in operations costs?

- What percentage of operation costs is allocated to telecommunication costs?

1.4.2 Employment creation

- Do high costs prevent callcentres from increasing their seats by employing more agents?
- Is there a situation where agents are laid off because the callcentre can no longer afford telecommunications costs?

1.4.3 Sustainability

- What is the average life span of a callcentre under this high costs environment?
- How many callcentres have closed shop because of high telecommunications costs.

1.4.4 Possible solutions

- Use of Voice Over Internet Protocol (VOIP); and
- Use of Least Costs Routers (LCR).

1.5 SIGNIFICANCE OF THE RESEARCH

South Africa faces a high unemployment rate. According to labour force survey published by *Statistics South Africa* in September 2006, 25.5% of the population between ages of 15 and 65, is unemployed. The Government has introduced a number of strategies to counter unemployment and callcentres have been identified as a potential vehicle to create jobs on a massive scale.

The biggest challenge that faces growth of the callcentre industry is high telecommunications costs, which can discourage foreign investors from investing in South Africa. The outcome of this research highlights the impact of high telecommunications costs.

1.6 DELINEATION OF THE RESEARCH

This research will be limited to callcentres that are located around Cape Town. When selecting callcentres for the research, the following were considered:

- Number of agents should be at least ten or more;
- Inbound and outbound callcentre;
- Offshore and onshore operation; and
- Not limited to any business sector, namely research, insurance, finance/banking sales or leisure.

The research does not cover public sector callcentres such as municipalities. Based on previous experience, it is often difficult to obtain information from Government controlled businesses, as they are sceptical to share information which is perceived as sensitive because of past bad experiences, namely media criticism.

1.7 RESEARCH DESIGN AND METHODOLOGY

The research design and methodology discusses geographical limitations of the research, sampling type and size, data collection method and data analyses methods. A definition of the research hypothesis is also provided in section 1.12.

1.8 Limitations

This research will focus on callcentres around Cape Town. The rationale for choosing Cape Town is to minimise travelling costs for employees. This option will also increase accessibility to the callcentres and reduce the total time to collect the required data.

1.9 Sampling

Probability sampling was used to select appropriate data. According to Samouel *et al.* (2007), in drawing a probability sample, selection of elements

is based on a random procedure that gives elements a known and nonzero chance of being selected, which minimizes selection bias. Findings based on a probability sample can be generalised to the target population with a specific level of confidence.

This research focuses on callcentres around Cape Town. According to *Calling the Cape*, a professional organisation that promotes callcentres around the Western Cape, Cape Town has approximately 200 registered callcentres. In order for reasonable sample to provide a good representation of the situation, 10% to 20% of the registered callcentre population should be considered for this research.

Major areas in which callcentres operate:

- Central Business District;
- Southern suburbs, particularly Claremont ;
- Northern suburbs, including Bellville; and
- Century City.

1.10 Data collection

Due to the size of this research and the type of data required, primary data was collected by using a quantitative data collection approach, questionnaires, and interviews.

According to Hair *et al.* (1995), quantitative data collection involves gathering numerical data using structured questionnaires to collect primary data from individuals. The data ranges from opinions to general background information of individuals such as gender, education, income, and company characteristics such as revenue and number of employees.

1.11 Data analysis

Descriptive statistics were used to present a summary of the findings, while multiple regression analysis was the chosen model. The rationale for choosing multiple regression analysis is because it has tolerance to enter

several independent variables into the same type of regression equation and predict a single dependent variable. A separate regression coefficient is then calculated for each independent variable that describes its individual relationship with the dependent variable. Multiple regression is a more realistic model because in the world in which we live, predictions almost always depend upon multiple factors, and not merely one.

1.12 Hypothesis

H1. High telecommunication costs slow down growth of the callcentre industry in Cape Town, South Africa.

H2. Telecommunication costs make up the largest percentage of operational costs within a callcentre.

H3. High telecommunication costs directly affect the number of people that a callcentre can employ.

H4. High telecommunication costs have caused several callcentres to close within two years of operation.

1.13 OUTLINE OF CHAPTERS

This chapter has presented a background and motivation for this research, while the problem statement, research questions, research objectives and research design and methodology, were also briefly discussed.

Chapter 2 comprises a literature review, and discusses what newspapers, industry and Government articles, internet searches and business magazines state about costs of telecommunications in South Africa.

Chapter 3 comprises a detailed research design and methodology outline, and explains and justifies methods that were selected for data collection and analysis.

Chapter 4 summarises and presents results of the empirical study in a simplified and understandable manner.

Chapter 5 includes further discussion and interpretation of the results and conclusions, limitations and recommendations against the backdrop of the literature presented in previous chapters.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter discusses negative and positive information, concerns, as well as comments that have been made in the media about high telecommunication costs in South Africa.

Reviews from articles and previous research conducted by industry commentators and analysts are also included this chapter. Views from different parties help to paint a picture of telecommunications costs in South Africa and the impact that it has on the callcentre industry.

2.2 Literature review

According to a survey by *Deloitte* (2007), the contact centre and Business Process Outsourcing & Offshoring (BPO&O) industry in the Cape metropolitan area presently employs 22 156 people. The total economic impact of the sector is hence within the region of R2.5 to R3.3 billion per annum, which equates to as much as 2.4% of Gross Regional Product for the Western Cape Province. In other words, the industry contributes significantly to the provincial economy.

Business day (2005) confirms that in recent years several factors have contributed to South African callcentre industry growth, including favourable time zone differences, a healthy business climate, deregulation, English language skills, political stability of South Africa and cultural diversity.

Research conducted by callcentres.net in 2005 indicated that an estimated 65 000 people are currently employed in 535 callcentres, which are operated in South Africa by local companies. With around 10 000 agents that deal specifically with overseas customers, it is estimated that the South African industry would secure nearly R1 billion in foreign investment during 2006. Cape Town should benefit the most from an inflow of foreign callcentre business.

Business day (2006) continued to state that, the callcentre industry faces several challenges, not least of which is that the South African Government continues to maintain a monopolistic telecommunications environment, which results in high prices. Conversely, Government has championed the local callcentre industry, since it believes that it holds much future potential.

Jones (2006) confirms that high costs of telecommunications result in a 20% to 30% premium on telecommunications prices, compared with major offshore callcentre outsourcing competitors such as India and the Philippines. Research shows that 10,000 jobs have been lost in South Africa as a result of losing offshore business to competitors such as India and the Philippines.

According to Jones (2006), consumer protection and data privacy legislation currently under draft by the government, are likely to have a further negative impact on this market. If promulgated as currently drafted, this legislation will preclude callcentres from making unsolicited calls, for example for the purposes of marketing and telesales, which could cut 20,000 to 25,000 callcentre jobs. Meanwhile, African countries such as Botswana, Tanzania, Kenya and Uganda are moving rapidly into the offshore callcentre market, and their Governments are removing all barriers to entry.

The South African callcentre industry is experiencing good growth particularly from banking, insurance and cellular industries. In addition, there is a lot of callcentre activity in the automotive, leisure and the fast moving consumer goods industries, while a number of larger outsource operators are doing well, says Jones (2006)

Another promising growth area is the public sector, since Governments worldwide regard callcentres as ideal vehicles for delivering services. In South Africa, the South African Revenue Services (SARS) and the Department of Trade and Industry currently employ world class callcentres.

According to du Toit (2007), while South Africa has become a preferred Business Process Outsourcing (BPO) and Contact Centre destination for the

USA and European markets, South Africa should engage in several priority areas including critical skills shortages in middle to senior management in order to maximise the industry's potential.

Business Report (2005) states that India which is presently a market leader in the callcentre industry, grew their seats exponentially from 96 000 in 2003 to 158 000 at the end of 2005. By comparison, the South African industry has grown by 18% from 38 400 to 45 400 seats during the same period. The Department of Trade and Industry's (DTI) sector development report, which was commissioned to investigate where South Africa lags behind its international competitors, pointed to several critical shortcomings. These included higher costs of using South Africa as a call based centre, compared to destinations such as India and the Philippines; the negative perception that exists regarding personnel security and crime rates in South Africa; and concerns about support that is provided to companies that want to migrate their businesses into South Africa.

The report also clearly stated that a shortage of skilled labour has stunted growth of the Business Process Outsourcing (BPO) industry in South Africa and that few global corporations have established their back office processing centres in South Africa.

The DTI sector development report stated although South African labourers are generally educated, there is further training that should be done to impart special skills to these human resources, and that the establishment of effective public and private partnerships with Government around key initiatives such as talent development and skill building, will be critical. The need to address significant shortcomings that are already apparent in the availability of managerial level employees, was echoed by the findings of a *Deloitte* study, which concluded "that action should be taken to ensure that future growth is not sabotaged by skills shortages".

According to Anon (2007), former President Thabo Mbeki renewed his promise to address the costs of telecommunications in South Africa during his State of the Nation address in February 2007. It was a familiar refrain;

President Thabo Mbeki made this promise for the past five years, but he (Mbeki) persisted with communications minister Ivy Motsepe Casaburri, who has failed to achieve what should have been her two main tasks, namely to reduce the costs of telecommunications and liberalise the local market, since she became a minister in 1999.

Minister Ivy Motsepe Casaburri succeeded in licensing the second fixed line network operator, Neotel, which took her five years, and most commentators agree that it will be a while yet before competition forces Telkom to cut rates. Another claimed success has been the long awaited Electronic Communications Act, which was gazetted in 2005, while its implementation has still not occurred.

The Act is aimed at partial liberalisation of the telecommunications industry. Although the foundation has been laid, the industry's troubled regulator the Independent Communications Authority of South Africa (ICASA), is not in a position to effectively oversee implementation. Far from liberalising the industry, the Government has direct or indirect ownership of Telkom, Vodacom and Sentech. While there is also Infracore, a new company, which was established by the Department of Public Enterprises to provide broadband services.

The Government has also stated that it will consider high costs of interconnection fees, charges that cellphone companies levy for calls between networks, which are inexplicably high, and significantly drive up costs of telecommunications in South Africa.

Even though information technology and telecommunications are a priority of the Accelerated and Shared Growth Initiative for South Africa (ASGISA), much of the political will to drive necessary reforms at speed, appears lacking.

Whatever the merits of Cell C's complaint to the Competition Commission about interconnection charges in 2006, it does underline the urgency of Government's stimulating competition within the sector. When companies

compete for market share, consumers are winners, since they receive lower prices and services.

According to Eslin (2005), Durban's Brightview, a United Kingdom (UK) internet service provider which, has 250 000 customers, has relocated its callcentre to Durban from India in a £2 million (R23.5 million) deal with South African contact centre, Bizworks. David Laurie, Brightview's chief executive, has stated that the main reason for relocating was due to high levels of turnover among callcentre agents in India.

Callcentre.co.za (2006) has revealed that South Africa has the second lowest turnover rate in the world at between 5 and 15 percent a year, while India had a high churn rate of about 35 percent for 2005.

India proved to be costs effective, but ultimately failed to meet Brightview customers' expectations. Callcentre agents should think laterally, show empathy towards clients and troubleshoot. South Africa has a population that is culturally diverse for callcentre work. The costs of setting up the callcentre in Durban was 60 percent cheaper than in the UK in terms of rental, staff and other operating costs, according to Laurie.

Bizworks, to which Brightview has outsourced its callcentre, has employed 43 full time callcentre agents, which service Brightview's clients. These agents will field an expected 25 000 calls a month from Brightview's 250 000 customers.

Willie Govender, chief executive of Bizworks, which was established in 2005, has stated that the business initially focused on telesales in the UK. However, presently with about 20 businesses in South Africa that conduct outbound sales to the UK, along with companies in India, competition is fierce. The reward for both callcentre agents and Bizworks has been limited.

Bizworks has since focused on inbound customer support and presently has support centres for the eThekweni municipality and Telebond, which is a bond originator business in South Africa.

According to Govender, Bizworks was one of the only black empowered businesses that engaged in international outsourcing for inbound customer support. eThekwini, through the KZNonSource initiative, has targeted the callcentre industry as an area for growth and job creation. KZNonSource aims to train 1 000 callcentre agents by the end of 2006.

It is estimated that, internationally, the callcentre industry will create 3 million additional jobs by 2008, while South Africa is trying to obtain a slice of this market.

2.3 Summary

Based on the articles, surveys and newspapers that were consulted in the literature review, it is evident that the future of the callcentre industry in South Africa appears promising. Most industry commentators and analysts have different views about the prospects of the callcentre industry. Some believe that key drivers of the industry will be telephone sales of financial and insurance packages and services, while others believe in business process outsourcing i.e. businesses outsourcing their internal customer queries and support to a third party. The only fact that they all seem to agree on, is high telecommunication costs which are charged by South African service providers.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focuses on research design and methodology. The following points are discussed in detail:

- Geographical limitations;
- Key concepts and variables of the research hypothesis;
- Research instruments and motivation;
- Sample design and sample techniques and criteria for the choice of sample size;
- Data collection processes and problems encountered;
- Data editing and data coding procedures; and
- Possible limitations and shortcomings.

Challenges that were encountered during the data collection stage are also discussed in this chapter, some of the information requested in the questionnaire was deemed private and confidential by some callcentres. Most callcentres were not comfortable with providing too much information about their finances. A disclaimer had to be included in the questionnaire, which warranted that all the collected data will be kept private and confidential and will be used for research only.

3.2 Research Design

The research is descriptive and quantitative in nature. This method was used to gain an insight into the research question and to identify factors that lead to the high telecommunications costs and its impact. The researcher would then be able to propose recommendations, which should alleviate the high telecommunication costs problems.

According to Samouel *et al.* (2007), descriptive research is designed to obtain data that describes characteristics of the topic of interest within the research.

Samouel continued to state that descriptive research designs are usually structured and specifically designed to measure characteristics that are described in the research question. Hypotheses derived from theory usually serve to guide the process and provide a list of what should be measured.

3.3 Research Methodology

3.3.1 Limitations

This research has focused on callcentres within the Cape Peninsula. The rationale for choosing Cape Town was to minimise travelling costs for employees. This option also increased accessibility to callcentres and reduced the time to collate required data.

The research covered four callcentre categories:

- Inbound - A callcentre that receives calls and resolves customer queries;
- Outbound – A callcentre that initiates calls to customers for sales or marketing related issues;
- On-shore – A callcentre that operates within the borders of South Africa; and
- Off-shore – A callcentre that operates outside of South Africa.

3.3.2 Sampling

Probability sampling was used to select appropriate data. According to Samouel *et al.* (2007), in drawing a probability sample the selection of elements is based on a random procedure that gives elements a known and nonzero chance of being selected, which minimizes selection bias. Findings based on a probability sample can be generalised to the target population with a specific level of confidence.

Calling the Cape, a professional organisation, which promotes callcentres around the Western Cape, states that Cape Town, had approximately 200 registered callcentres by the end of 2007. In order for a reasonable sample to provide a valid representation of the situation, 10% to 20% of the

registered callcentre population was considered for this research. A majority of callcentres are based within the Cape Town Central Business District.

3.3.4 Data collection

Due to the size of this research and the type of data required, primary data was collected by using a quantitative data approach.

According to Hair *et al.* (1995), quantitative data collection involves gathering numerical data by using structured questionnaires to collect primary data from individuals. The data ranges from opinions to general background information of individuals such as gender, education and income, as well as company characteristics such as revenue and number of employees.

A guideline by Samouel *et al.* (2007) was followed when the questionnaire was designed. The guide has five steps:

Step 1: Initial Considerations

- Clarify the nature of the research problem and objectives.
- Develop research questions to meet research objectives.
- Define target population and sampling frame.
- Determine sampling approach, sample size and expected response rate.
- Make preliminary decisions about the methods of data collection.

Step 2: Clarification of Concept

- Ensure concept(s) are clearly defined.
- Select the variables/indicators that represent the concepts.
- Determine levels of measurement.

Step 3: Determine Question Type, Format and Sequence

- Determine the type of questions to include and their order.
- Check coding and wording of questions.

- Decide on grouping of questions and the overall length of the questionnaire.
- Determine the structure and layout of the questionnaire.

Step 4: Preset the Questionnaire

- Determine the nature of the preset for the preliminary questionnaire.
- Analyse initial data to identify limitations of the preliminary questionnaire.
- Refine the questionnaire as needed.

Step 5: Administer Questionnaire

- Identify best practice for administering the type of questionnaire that will be utilized.
- Ensure that a process is in place to handle completed questionnaires.
- Determine a deadline and follow up methods.

All five steps stipulated above are incorporated in the questionnaire, which is attached as appendix A.

The questionnaires were distributed to 35 callcentres, via electronic mail (e-mail) and feedback was also received via email. Of the 35 questionnaires distributed, only 21 callcentres responded, which equate to 10% of the callcentre population of 200.

The questionnaire was directed to callcentre owners or individuals of management, since information that was required, was strategic and high level.

3.3.5 Data analysis

Description statistics were used to present a summary of the findings, while multiple regression analysis was the chosen model. The rationale for choosing multiple regression analysis is because it has tolerance to enter several independent variables into the same type of regression equation and predict a single dependent variable. A separate regression coefficient is then

calculated for each independent variable that describes its individual relationship with the dependent variable. Multiple regression is a more realistic model because in the world in which we live in, predictions almost always depend upon multiple factors, and not merely one.

SPSS (Statistical Package for the Social Sciences) software was used to analyse the data. SPSS has functionality to perform analysis on cross tabulation, frequencies and can create descriptive ratio statistics. Mr Rajab Sekume, a lecturer at the University of South Africa's (UNISA) Departments of Statistics was appointed to advise on usage of SPSS and the best methods to analyse data by using SPSS.

3.3.6 Reliability and Validity of Data

Melville and Goddard (1996:37) define reliability as consistency of measurements whereas validity is an instrument that measures if what they were supposed to measure, is correct. Hussey and Hussey (1997:57) regard reliability as the instrument which measures the repetition of the research findings, whereas validity is the extent to which research findings accurately represent what is really happening in the situation.

For the purpose of validity and reliability of data, the following measures were undertaken:

- A pilot study preceded the actual questionnaire distribution. Three callcentre owners were involved in the sampling stage.
- Each of the three owners was given a cover letter to explain the nature of the research project.
- In the cover letter, the owners were assured of privacy and confidentiality of the information provided, while anonymity was also guaranteed.

3.3.6 Hypothesis

The questionnaire was designed to cover variables that were required to support the hypotheses. Below is a list of hypotheses and relative questions:

H1. High telecommunications costs slow down the growth of the callcentre industry in Cape Town, South Africa.

Relative Question

- What, in your opinion, slows growth of the callcentre industry in Cape Town?

High telephone call prices		Skills shortage		Strict regulation	Government		All	
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H2. Telecommunications costs make up the largest percentage of operational costs in a callcentre.

Relative Questions

- What percentage of average monthly revenue goes into operational costs?

1 – 10%		10 – 20%		20 – 30%		30 – 40%		40 - 50%		More than 50%
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- What percentage of operating costs on average, comprise telephone calls per month?

0 – 25%		25 – 50%		More than 50%	
---------	--	----------	--	---------------	--

H3. High telecommunications costs directly affect the number of agents that a callcentre can employ.

Relative Questions

Statement	Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly
1. I am happy with current				

telecommunications prices in South Africa.				
2. Telecommunications costs negatively affect the number of agents that you employ.				

H4. High telecommunications costs have driven several callcentres to close within two years of operation.

Relative Questions

- How old is your callcentre?

0 - 3 years	3 - 5 years	5 and above
-------------	-------------	-------------

Statement	YES	NO
1. Do you know any callcentre that closed down as a result of high telecommunications costs?		

3.4 Summary

This chapter discussed design and methodology that were used for this research. The reason for choosing these designs were given and the importance of a descriptive approach were outlined, while means and methods of data collection and analysis were also presented.

Problems that were encountered when gathering data included the type of information that was requested on the questionnaire, particularly because some callcentres were unwilling to share their expenditure information even if their anonymity and confidentiality was guaranteed. A total of 35 questionnaires were distributed and only 21 responded. For most of the respondents, the researcher had to confirm with them by telephone that the

information provided will not be used for anything else but for research, and that they would remain anonymous.

CHAPTER 4: RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter reports on findings and presents an analysis of data that was collected from all callcentres that participated in the research. The following key points were selected as hypothesis and will form a basis for discussion:

H1: High telecommunications costs slow down growth of the callcentre industry in Cape Town, South Africa.

H2: Telecommunications costs make up the largest percentage of operational costs in a callcentre.

H3: High telecommunications costs directly affect the number of agents that a callcentre can employ.

H4: High telecommunications costs have caused several callcentres to close down within two years of operation.

The chapter will also cover market analyses, market demographics and preferred technology. A reason why preferred technology was included in the questionnaire is because the type of telephony technology, which is used by callcentres, can influence actual costs of communication, such as VOIP.

4.2 Market analysis

4.2.1 Market breakdown

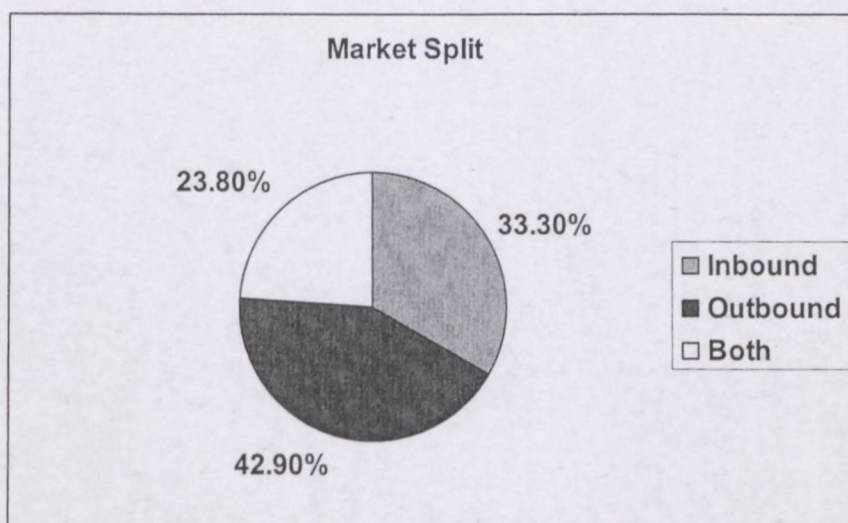
There are two main types of callcentres in the market, namely inbound and outbound. Inbound callcentres' main purpose is to service clients that dial in, for example, attend to customer queries. Outbound callcentres mainly phone clients for product sales and surveys.

Table 4.2.1 below indicate division between different types of callcentres:

Table 4.2.1: Types of callcentres

Description	Frequency	Percentage
Inbound	7	33.3
Outbound	9	42.9
Both	5	23.8
Total	21	100

Figure 4.2.1: Chart for callcentres types

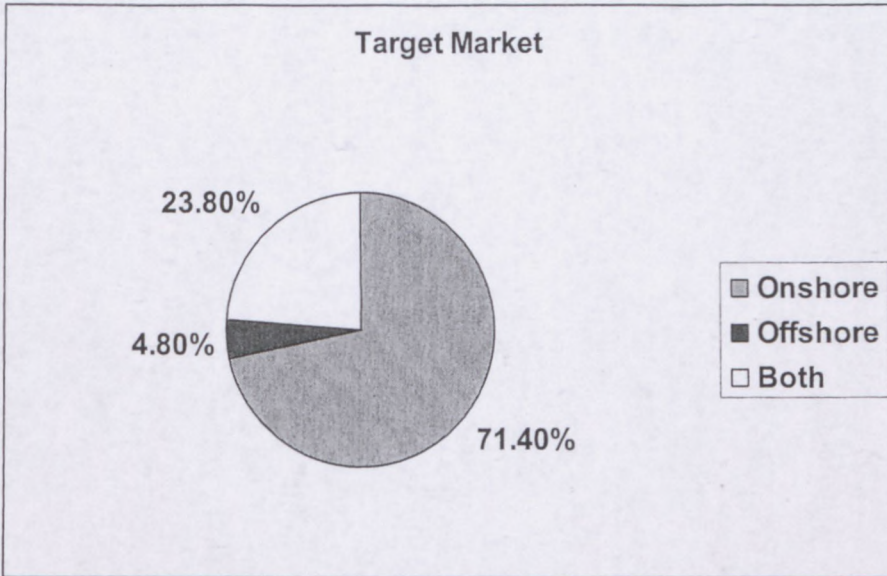


Based on research findings, 42.9% of callcentres in the Cape Peninsula are in the outbound business, while 33.3% are inbound.

The Cape Argus (2007) reported that European and American companies are taking callcentre businesses offshore because of lower operational costs. However, analyses have proved contrary to the latter statement.

According to Figure 4.2.2, 71.4 % of callcentres operate onshore compared to 4.8% that operate offshore. This Figure reflects a positive growth of the South African economy over the past few years.

Figure 4.2.2: Target Market



4.2.2 Operating hours

Callcentre operating hours differ according to their target market. Emergency inbound callcentres can operate for 24 hours a day, seven days a week. Conversely offshore callcentres may be required to operate at night in order to service their overseas clients who are in a different time zone for example, United States of America.

Figure 4.2.3: Operating hours

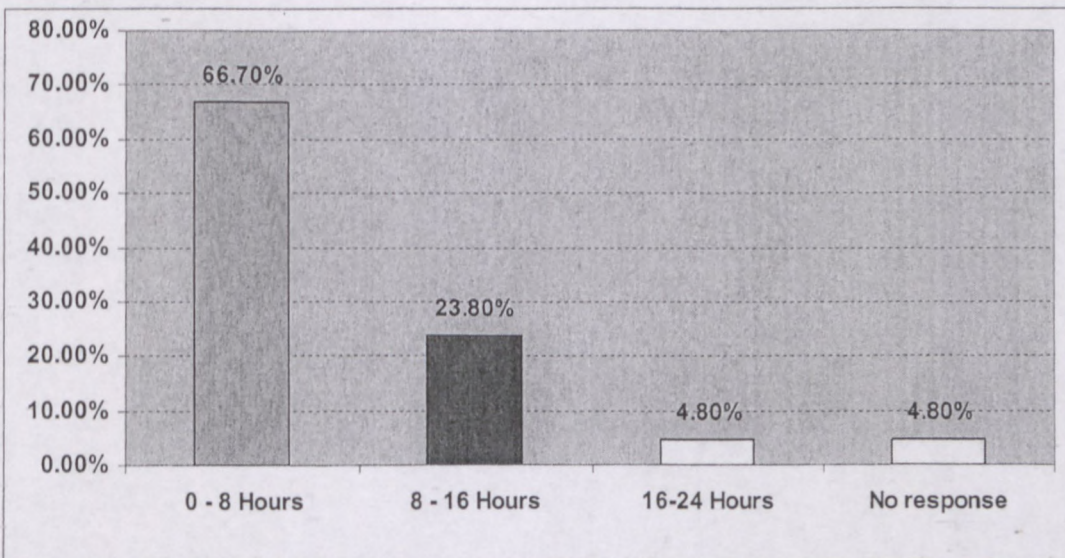


Figure 4.2.3 above reflects operating hours of callcentres in the Cape Peninsula. A total of 66.7% of callcentres operate on the 0-8 hours time range compared to 4.8% on the 16-24 hours range. These findings can be cross referenced to Figure 4.2.2, which states that 71.4% of callcentres service the onshore market, thus the higher frequency for the 0-8 hours time range.

Furthermore, it was established that 42.9% of callcentres operate from Monday to Saturday compared 47.6% that operate from Monday to Friday; refer to Table 4.2.2 below. This outcome also mirrors the nature of South African business culture, which means that callcentres are mainly open from Monday to Friday.

Table 4.2.2: Operating Days

Description	Frequency	Percentage
Open Saturday	9	42.9
Open Sunday	1	4.8
Open both days	1	4.8
Closed both days	10	47.6

4.2.3 Efficiency of callcentre agents

The goal of this research is to determine the impact of high telecommunications costs on the callcentre industry. Therefore, if callcentre agents spend too much time on a call before closing a deal on an outbound callcentre, it will result in a high telephone bill. According to Table 4.2.3 below, 81% of callcentres spend 5 - 10 minutes on a call for a successful sale and Table 4.2.4 below shows that 85.7% spend 0 – 5 minutes on a call for a non-successful sale.

Table 4.2.3: Average call duration of a successful sale

Description	Frequency	Percentage
0 – 5 Minutes	0	0
5 – 10 Minutes	17	81.0
10 Minutes and above	1	4.8
No response	3	14.3
Total	21	100

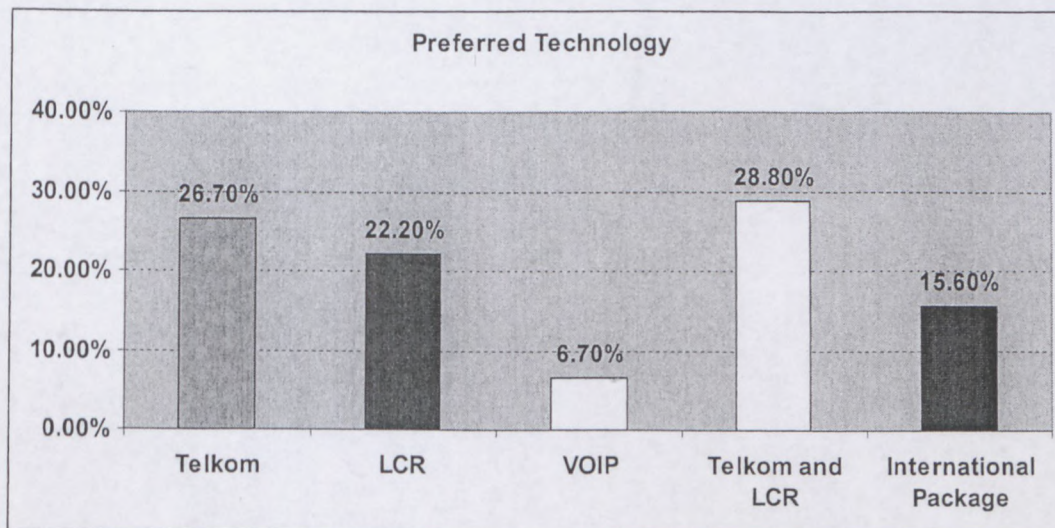
Table 4.2.4: Average call duration of non successful sale

Description	Frequency	Percentage
0 – 5 Minutes	18	85.7
5 – 10 Minutes	0	0
10 Minutes and above	0	0
No response	3	14.3
Total	21	100

4.2.4 Preferred Technology

According to Figure 4.2.4 below, 28.8% of callcentres in the Cape Peninsula use a combination of Telkom and Least Costs Router (LCR) for their telephone calls compared to 26.7% that use Telkom exclusively. Telkom has been South Africa's main stream telephone service provider for many years, but because of their high phone call prices, callcentres have resorted to using LCR's.

Figure 4.2.4: Technology



4.3 High telecommunications costs slow down growth of the callcentre industry in Cape Town, South Africa.

4.3.1 Factors affecting growth of callcentres

Based on the research findings 52.4% of participants believe that high telecommunications costs and skills shortages hinder growth of the callcentre industry in the Cape Peninsula; refer to Table 4.3.1 below. These findings support results of the literature review. *Business day* (2006) states that the callcentre industry faces several challenges, not least of which is that the South African Government continues to maintain a monopolistic telecommunications environment, which has resulted in high prices.

Table 4.3.1: Factors affecting growth of callcentres

Description	Frequency	Percentage
High telephone call prices	1	4.8
Strict Government regulations	4	19
Skills shortages	0	0
All of the above	4	19
High telephone costs	11	52.4

and skills shortages		
No response	1	4.8
Total	21	100

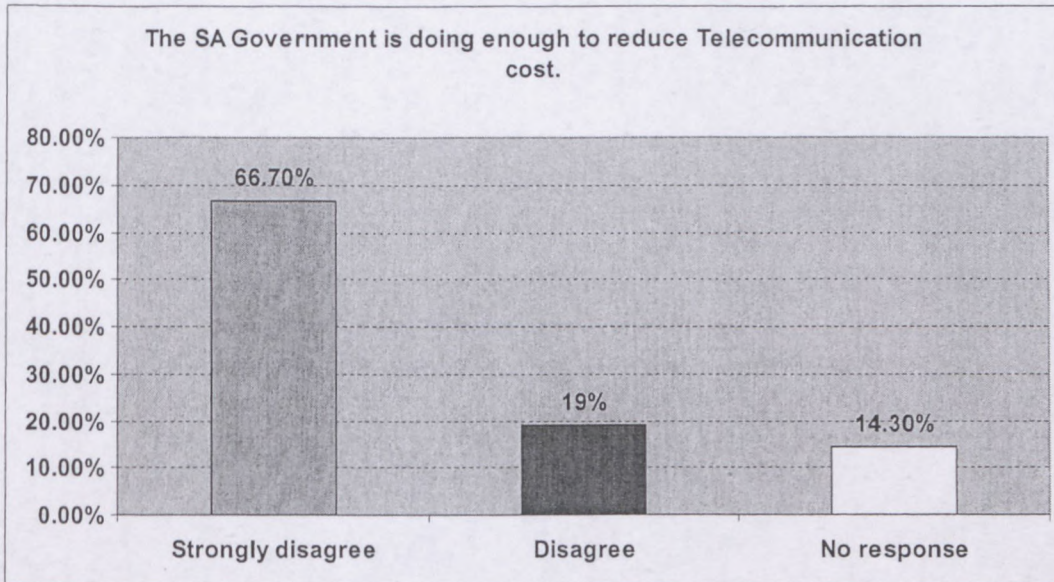
In further support to the literature review, *Business Report* (2005) stated that India which is presently the market leader in the callcentre industry, grew their seats exponentially from 96 000 in 2003 to 158 000 by the end of 2005. By comparison, the South African industry has grown by 18% from 38 400 to 45 400 seats during the same period. The Department of Trade and Industry's (DTI) sector development report, which was commissioned to examine where South Africa trails their international competitors, pointed to several critical shortcomings. These include high costs of using South Africa as a call based centre, compared to destinations such as India and the Philippines; negative perceptions that exist regarding personnel security and crime rates in South Africa; and concerns about support provided to companies that want to migrate their businesses to South Africa.

4.3.2 Government contribution

Referring to the literature review, Anon (2007) reported that former president, Thabo Mbeki, renewed his promise to address costs of telecommunications in South Africa during his State of the Nation address in February 2007. It was a familiar refrain; President Thabo Mbeki made this promise for the past five years, but he persisted with Communications Minister Mrs Ivy Motsepe Casaburri, who failed to achieve what should have been her two main tasks, namely to reduce costs of telecommunications and to liberalise the local market since she became minister in 1999.

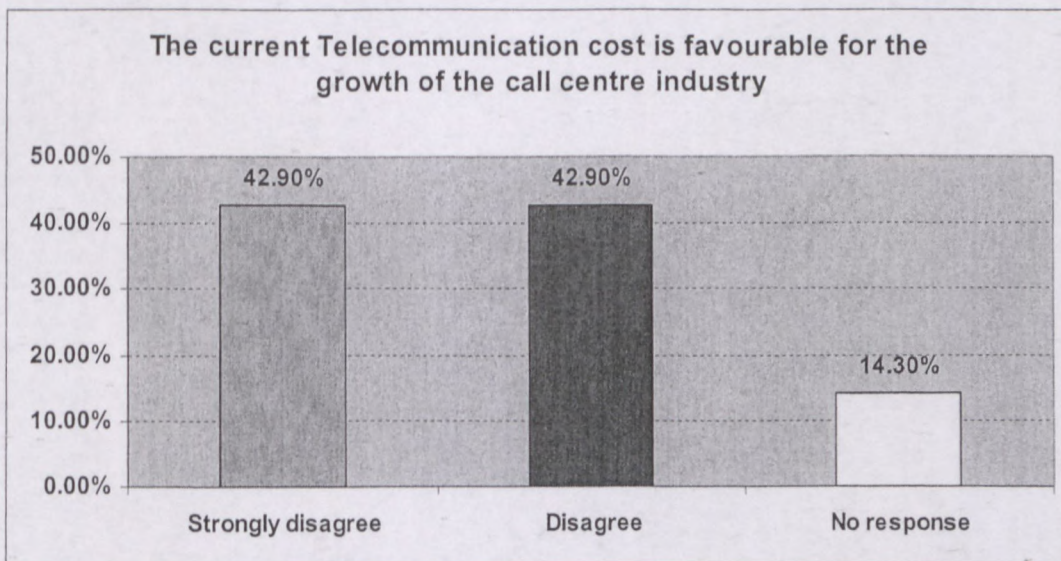
The research finding supports the literature review. Figure 4.3.1 below reflects that 66.7% of callcentres in the Cape Peninsula believe that the Government has not done enough to reduce telecommunications costs. In total, 85.7% of callcentres are dissatisfied with the Government's contribution.

Figure: 4.3.1: Government contribution



In further support to the literature review, according to Table 4.3.2 below, 42.9% callcentres strongly disagree and 42.9% disagree that current telecommunications costs are favorable for growth of the callcentre industry. In total, 85.8% of callcentres disagreed with this point, compared to the 14.3% who did not respond.

Figure: 4.3.2: Telecommunications costs

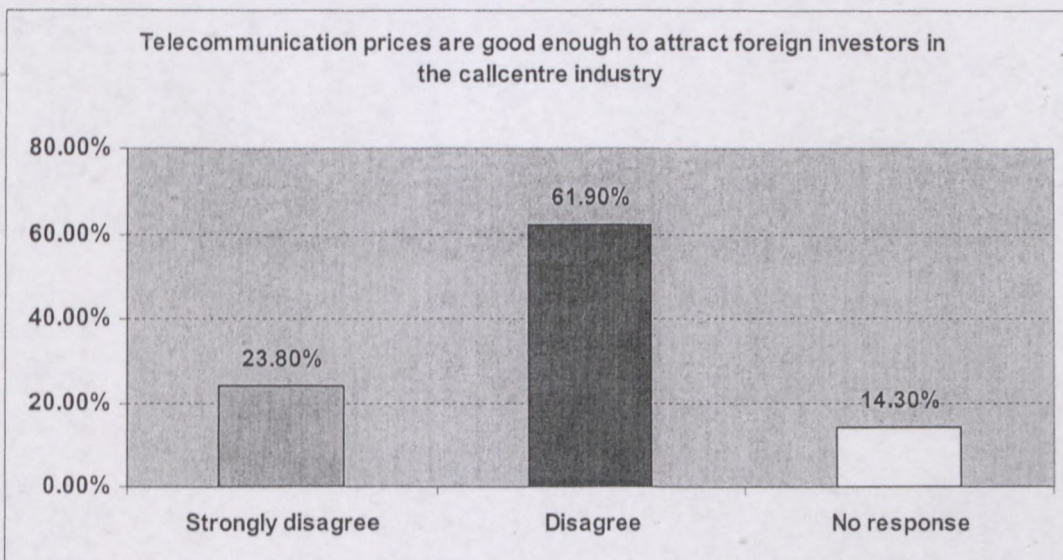


4.3.3 Foreign Direct Investment

In order for the South African economy to experience maximum growth, it requires local investment in infrastructure and a high degree of Foreign Direct Investments (FDI). Callcentres are not immune to the latter statement, since they also require foreign investors to experience positive growth.

Referring to the literature review, Du Toit (2007) reported that while South Africa has become a preferred Business Process Outsourcing (BPO) and Contact Centre destination for the USA and European markets, the country should engage with several priority areas including critical skills shortage in middle to senior management as means to maximise the industry's potential. In support of the literature review, the research findings, as reflected in Figure 4.3.3, indicate that 61.9% of callcentres disagree that telecommunications costs is good enough to attract foreign investors. In total 85.7% respondents disagreed on that statement.

Figure: 4.3.3: Foreign direct investment

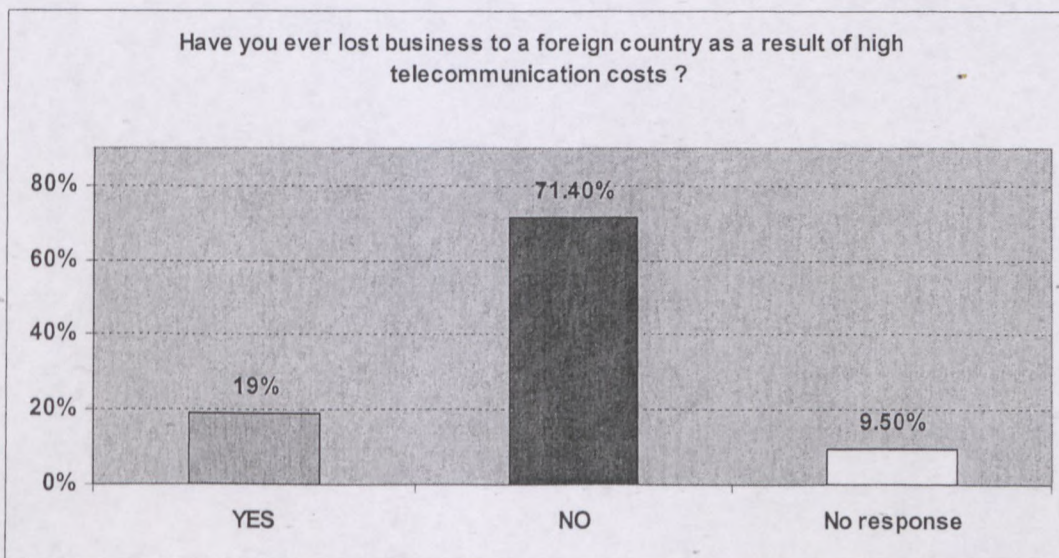


Should South Africa fails to attract foreign investors, business opportunities will be lost to other emerging markets with favourable business terms and conditions, for example, high skills pull, low crime rate and cost effective telecommunications.

In the literature review, Jones (2006) reported that consumer protection and data privacy legislation that are in the pipeline are likely to have a further negative impact on this market. If promulgated as currently drafted, this legislation will preclude callcentres from making unsolicited calls, for example for the purposes of marketing and telesales and this could cut between 20,000 and 25,000 callcentre jobs. Meanwhile, African countries such as Botswana, Tanzania, Kenya and Uganda are moving rapidly into the offshore callcentre market, and their Government's are removing all barriers to entry.

The research findings prove contrary to the paragraph above. According to Figure 4.3.4 below, 71.4% of callcentres have not lost business to an offshore competition compared to 19% that have lost business.

Figure: 4.3.4: Business lost to other countries



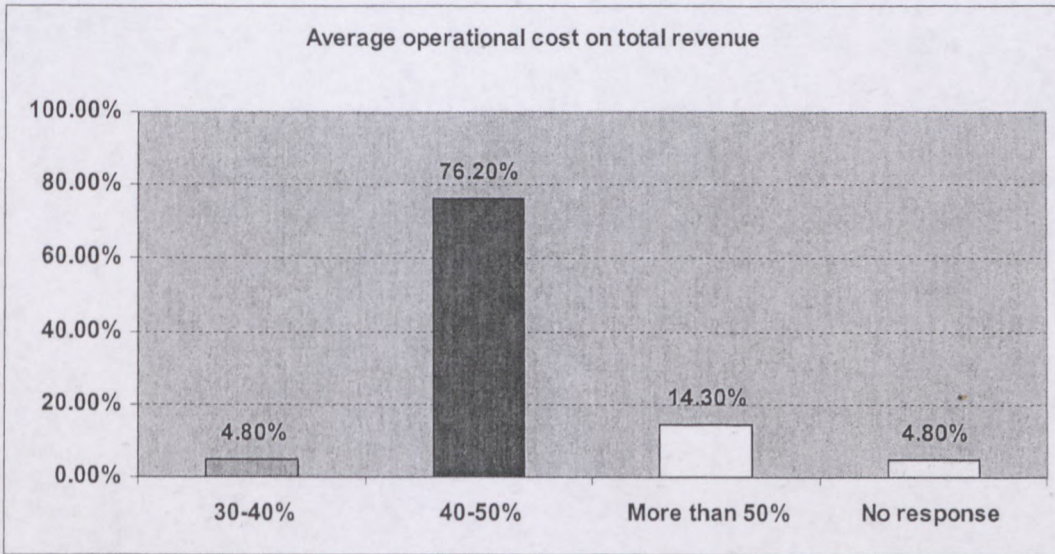
4.4 Telecommunications costs make up largest percentage of operational costs in a callcentre.

In the literature review, Jones (2006) stated that high costs of telecommunications result in a 20% to 30% premium on telecommunications prices, compared with major offshore callcentre outsourcing competitors such as India and the Philippines. Jones (2026) continued to state that 10,000 jobs

have been lost in South Africa as a result of losing offshore business to competitors such as India and Philippines.

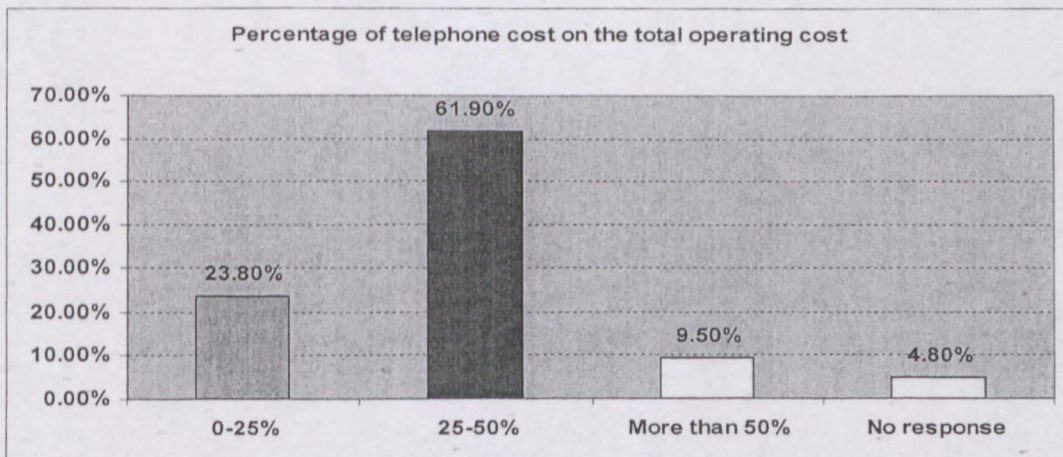
The research findings support the above statement. According to Figure 4.4.1 below, 76.2% of callcentres in the Cape Peninsula spend 40 to 50% of their revenue on operational costs.

Figure: 4.4.1: Operational costs



In further support of the literature review, Figure 4.4.2 below reflects that 61.9% of callcentres in the Cape Peninsula spend between 25-50% of their operational costs on telecommunications compared, to 23.8% who spend 0-25%.

Figure: 4.4.2: Telephone costs



The above results explain why 85.8% of callcentres in Figure 4.3.2 disagreed when they were asked if current telecommunications costs is conducive to growth of the callcentre industry.

In support of the literature review, a cross tabulation Table was created between two variables. Variable one: In your opinion, what slows growth of the callcentre industry in the Cape Peninsula? Variable two: What percentage of average monthly revenue constitutes operational costs? The results are presented in Table 4.4.1 below:

Table 4.4.1: Cross tabulation

		What percentage of average monthly revenue constitutes operational costs?				TOTAL
		30 - 40%	40 - 50%	More than 50%	No response	
Factors that slow down growth of the callcentre industry in Cape Town	High telephone call prices	0	0	1	0	1
	Strict Government regulations	0	4	0	0	4
	High telephone costs and skills shortage	1	9	1	0	11
	All of the above	0	2	1	1	4
	No response		1	0	0	1
	Total	1	16	3	1	21

According to findings in the above table, nine respondents who stated that high telephone costs and skills shortage slows the growth of the callcentre industry, spend 40-50% of their revenue on operational costs.

4.5 High telecommunications costs directly affect the number of agents that a callcentre can employ.

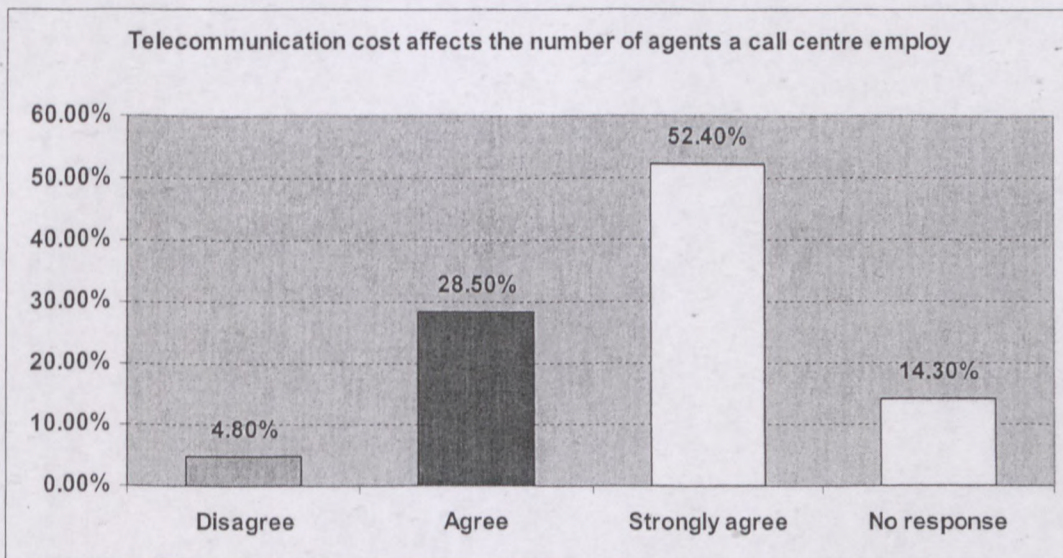
Referring to the literature review, *Business day* (2005) stated that in recent years, several factors have contributed to South African callcentre industry

growth, including favourable time zone differences, a healthy business climate, deregulation, English language proficiency, political stability and cultural diversity.

According to Jones (2006), the South African callcentre industry has experience positive growth especially in the banking, insurance and cellular industries. In addition, there is a lot of callcentre activity in the automotive, leisure and fast moving consumer goods industries, while a number of larger outsource operators are also doing well in this respect.

The findings disagree with the literature review in this case, because according to Figure 4.5.1 below, 52.40% of callcentres in the Cape Peninsula strongly agree that telecommunications costs affect the number of agents that a callcentre employs. Therefore, if telecommunications costs are high, it will directly increase operating costs, and, as a result, callcentres will employ fewer agents as means to minimize costs.

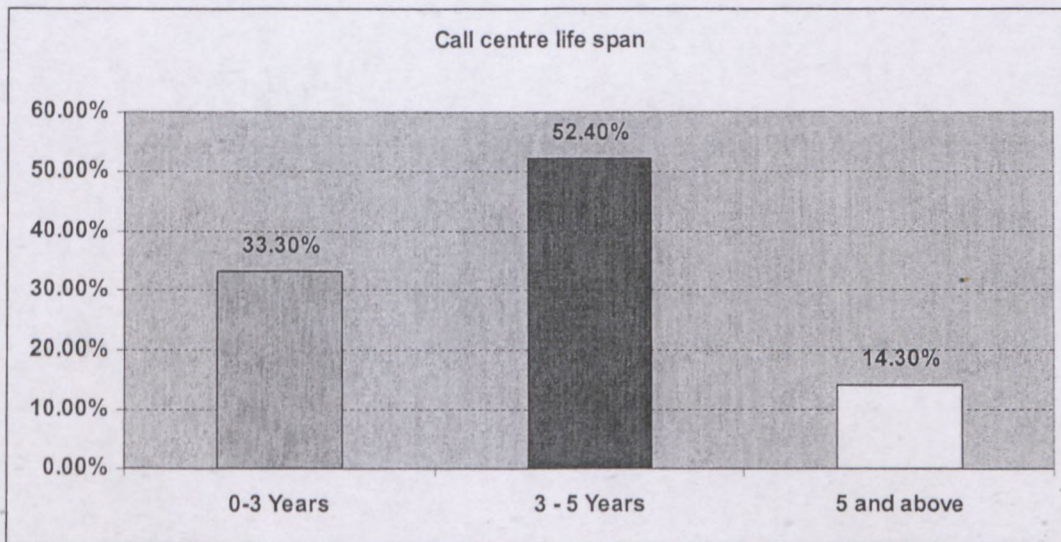
Figure: 4.5.1: Telephone costs



4.6 High telecommunications costs have caused several callcentres to close within two years of operations.

The hypothesis suggests that callcentres close their businesses within the first two years of operation. However, analysis proved otherwise, since according to callcentres in the Cape Peninsula, 33.3% of callcentres have closed within the first three years, compared to 52.4% that close between a range of three to five years. Refer to Figure 4.6.1 below.

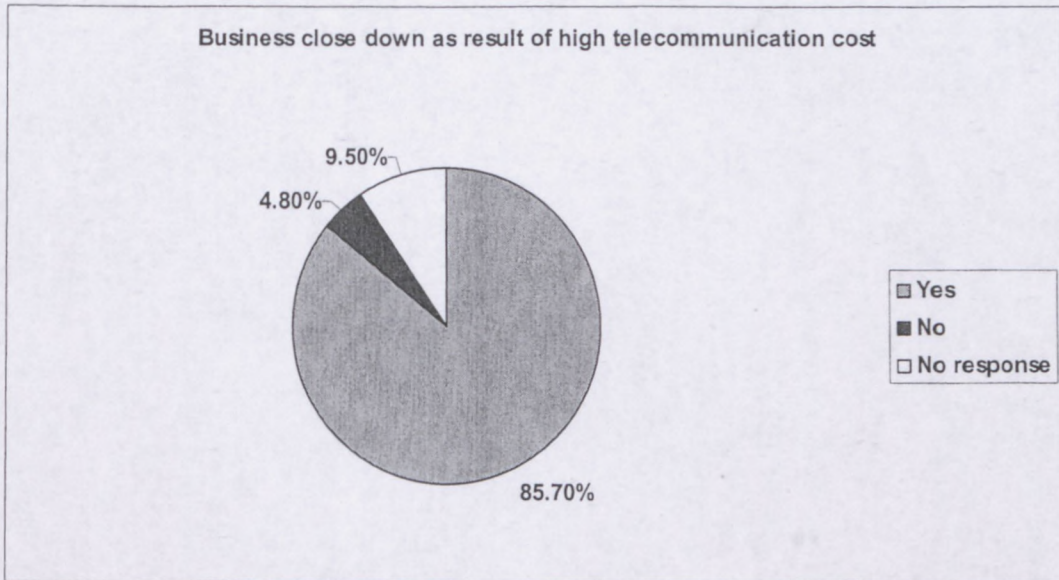
Figure: 4.6.1: Average callcentre life span



Of the 21 callcentres in the Cape Peninsula that participated in the research, 85.7% of them know at least one callcentre that closed as a result of high telecommunications costs.

These findings are in line with Figure 4.6.1, which shows that 52.4% of callcentres close down between the first three to five years of operation.

Figure: 4.6.2: Effects of high telecommunications costs



4.7 Summary

It can be suggested from the results outlined in this chapter that high telecommunications costs indeed affect growth of the callcentre industry in the Cape Peninsula. Callcentres spend too much money on operational costs, and as a result, they cannot afford to reinvest in their businesses in order to experience positive growth.

Even though the South African Government has in the past promised to intervene, through the Department of Communication and Technology, to decrease prices, most callcentres still believe that enough is not being done in this respect.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses conclusions and recommendations of the research, and all significant points that were discovered in Chapter 4. Together these findings are compared to the literature that was reviewed and any anomalies, findings, deviations and suggested possible reasons, are also discussed.

Relevance of the research and any aspects that require further research, are discussed, as well as any possible implications of the results for policy or practice.

The headings covered in this conclusion section appear according to Chapter four's results. These conclusions are followed by recommendations in section 5.2. The headings covered are market breakdown, operating hours, efficiency of callcentre agents, Government contributions, foreign direct investments and all consequences of high telecommunications costs are also commented on.

5.1.1 Market breakdown

Current market breakdown of callcentre business in the Cape Peninsula comprises 33.3% inbound, 42.9% outbound and 23.8% is a combination of both. This is evident in the bull economy that South Africa has experienced in the past 14 years. Most outbound callcentres dial out to sell products and services to consumers and, therefore, under positive economical circumstances, it is expected to have a high number of outbound callcentres.

5.1.2 Operating hours

Most callcentres (67%) operate between 8:00 and 17:00, which are normal business operating hours in South Africa.

5.1.3 Efficiency of callcentre agents

Results in Chapter 4 show that more than 81% of callcentre agents spend between 5 and 10 minutes on a successful sale within an outbound callcentre.

5.1.4 Government contribution

A majority of callcentre owners feel that the South African Government does not do enough to help decrease the price of telecommunications. As a result, the callcentre owners think that they are slowly losing their international position as one of the preferred outsourcing countries, although this was not proven in this research.

5.1.5 Foreign Direct Investment

When a question was posed to callcentres that participated in the research about the affordability of South African telecommunications prices to attract foreign investors, 61.9% stated that it is too expensive.

In order for the local callcentre industry to experience optimum growth, it requires high inflow of offshore/foreign investors.

5.1.6 Telecommunications costs constitute largest percentage of operational costs in a callcentre

Based on the research finding, 76.6% of callcentres spend 40-50% of their revenue on operational costs. A larger portion of operational costs is spent on telecommunications. These margins make the callcentre business less attractive.

The Western Cape Government has identified callcentres as one of the industries, including farming and tourism which should be used as vehicles to reduce the unemployment rate within the region. However, if telecommunications costs remain high, the callcentre industry will continue to struggle.

5.1.7 High telecommunications costs directly affect the number of agents that a callcentre can employ

Outbound callcentres are mostly affected by high telecommunications prices. In order to keep their operational costs under control, outbound callcentres resort to hiring fewer agents and stretch them to the limit. Conversely, inbound callcentres hire agents based on the demand of their service because they are not affected as much by the high telecommunications prices. This is because customers make calls to an inbound callcentre, hence they carry these costs.

5.1.8 High telecommunications costs have caused several callcentres to close down within two years of operation.

According to results in Chapter 4, 33.3% of callcentres in the Cape Peninsula closed down within the first two years of operation. The reason for this closure is because of high telecommunications costs.

The South African Government encourages growth of small to medium size enterprises (SMME's), which will help to create jobs and alleviate unemployment. However, if most new businesses do not survive beyond its first two years, then this vision will be jeopardised.

5.1.9 Technology Conclusions

According to findings in Chapter 4, most callcentres still use the traditional method of making voice calls provided by Telkom, MTN, Vodacom and CellC. They have not taken advantage of VoIP (Voice over Internet Protocol), which is the family of technologies that allow IP networks to be used for voice applications such as telephony, voice instant messaging, and teleconferencing. VoIP technology is explained further on the Technology recommendations section.

5.2 Recommendations

This section presents recommendations with regard to market breakdown, operating hours, efficiency of callcentre agents, Government contributions, foreign direct investment and consequences of high telecommunications costs.

5.2.1 Market breakdown

It is evident from the results discussions presented in Chapter 4 that outbound callcentres have higher operating costs compared to inbound callcentres. To have a good balance of income and expenses, it is imperative for callcentres to start growing their inbound business.

Inbound callcentres receive calls from customers to address their queries or complaints. Businesses and other institutions normally outsource their customer care to independent callcentres and they are billed according to the number of calls received or queries addressed.

5.2.2 Operating hours

A high percentage of the working class in South Africa work between 8:00 and 17:00. In order for callcentres to service this market efficiently, they should increase their working hours to at least 19:30 so that people can phone in to have their queries addressed in the comfort of their homes. This will also help outbound callcentres to sell their products and service when most customers are at home and can attend to their phones.

5.2.3 Efficiency of callcentre agents

The more time an agent spends on a call in an outbound callcentre, the higher his/her operating costs will be. Under high telecommunications costs circumstances such as in South Africa, outbound callcentre agents should be trained to close deals as quick as possible in order to reduce the time spent on a call.

The callcentre industry should introduce incentives for agents that close their deals the quickest and perhaps instil commission penalties for those who take longest.

5.2.4 Government contributions

In order for the callcentre industry to flourish and reach world class standards and make South Africa the preferred choice for international companies when it comes to outsourcing their callcentre services, the Government should play a more active role.

Currently, the Government's involvement is limited to labour related issues. If this industry should grow, the Government should introduce mechanisms, which will decrease prices of telecommunications and perhaps provide tax reductions to callcentres that employ more than 200 people.

These measures will not only help the growth of the callcentre industry, but it will alleviate poverty by creating sustainable employment.

5.2.5 Foreign Direct Investment

Most countries in the west such as in Europe and the America outsource their customer support divisions to Asia and Africa. This practise benefits them through low labour and infrastructure costs. South Africa is an English medium country, which gives them an upper hand compared to countries such as India, China, Malaysia and Egypt. However, this advantage will cease if the high telecommunications costs environment persists and business opportunities will be lost to competing countries.

The South African Government and callcentre industry champions should work together to create a conducive investment environment, which has an affordable telecommunications costs. The skills development area also requires attention.

5.2.6 Telecommunications costs make up largest percentage of operational costs in a callcentre

In order for the callcentre industry to flourish and attract more entrepreneurs to venture into this business, operational costs should reduce to at least a range of 20-30% of revenue. For this range to be a reality, telecommunications costs should decrease immensely because currently it makes up a larger portion of operational costs.

5.2.7 High telecommunications costs directly affect number of agents that a callcentre can employ

The callcentre industry has been identified as one of the vehicles of high scale employment that can help to alleviate unemployment in the Cape Peninsula. The Government and callcentre industry should introduce methods and strategies, which will reduce telecommunications costs.

The South African Government, via the communications regulator ICASA (Independent Communications Authority of South Africa), can intervene by persuading telecommunications service providers such as Telkom, MTN, Vodacom and CellC to reduce current prices of telephone calls. In order for this to happen it requires a change of policy and the only institution with powers to do this, is the Government.

If telecommunications service providers do not agree to reduce the rates of calls, perhaps an exception should be made and special rates should be introduced for the callcentre industry, which will stimulate growth and, as a result more jobs will be created.

5.2.8 High telecommunications costs have caused several callcentres to close within two years of operation

A further study should be undertaken to compare the average life span of new businesses in other sectors to the callcentre industry. This will provide an understanding of whether new businesses close down as a result of high

operating costs that erode financial independence or if there are other reasons.

5.2.9 Technology Recommendations

In order for telecommunications costs to be reduced, it requires policy and regulation changes from the Government. This option serves as a long term solution. For a short to long term solution, voice over internet protocol (VoIP) should be used.

What is VoIP?

VoIP is a family of technologies that allow IP networks to be used for voice applications such as telephony, voice instant messaging, and teleconferencing.

Why is VoIP a better option?

The number one reason to switch to VoIP technology for telephone service is costs reduction. VoIP has become popular largely because of the costs advantages to consumers over traditional telephone networks. VoIP can decrease one's monthly phone bill by at least 20% to 50%, on average, according to Neotel, the VoIP service provider.

VoIP offers cheaper international long distance rates, which are generally one-tenth of what is charged by traditional phone companies. Its portability makes it an effective option and callcentres that operate on offshore markets, could avoid expensive international call charges.

Most Internet connections are charged by using a flat monthly fee structure. An Internet connection for both data traffic and voice calls can allow consumers to get rid of one monthly payment. In addition, VoIP tariff plans do not charge a per-minute fee for long distance calls.

How does VoIP work?

In all VoIP systems, one's voice is converted into packets of data, like little files, and then transmitted to the recipient over the internet and decoded back into one's voice at the other end. To make it quicker, these packets are compressed before transmission, like zipping a file.

Actual Costs of VoIP

In order to be able to use VoIP to make and receive calls to and from people who do not have VoIP, one should subscribe to a gateway service that provides a bridge between VoIP and conventional phone networks.

Advantages of VoIP

VoIP phone service providers offer several advantages to residential and business users. All one needs in order to access this service, is a high speed Internet connection.

Low Costs

This technology leads to greater financial savings because there will only be one network carrying the voice and data provided by only one supplier. If one has a broadband Internet connection (DSL or cable), one can make PC-to-PC phone calls anywhere in the world for free. If one wishes to make a PC-to-phone connection, there is usually a charge for this but probably much cheaper than regular phone service.

One can pay as you go or sign up with a VOIP service provider and pay a monthly fee in return for unlimited calls within a certain geographic area.

No extra cables required

A VoIP phone number, unlike a regular phone number, is completely portable. Most commonly referred to as a virtual number, one can take it anywhere should one want to relocate one's business.

Features

Unlike regular phone services which usually charge more for extra features, VOIP comes with a host of advanced communication features. For example, call forwarding, call waiting, voicemail, caller ID and three-way calling, are some of the several services included with VOIP telephone service at no extra charge. One can also send data such as pictures and documents at the same time that one talks on the phone.

VoIP phones can integrate with other services that are available on the Internet including video conversation, message or data file exchange, in parallel with conversation and audio conferencing.

Disadvantages of VoIP

VOIP is a good solution but it also has its own challenges.

No service during power outages

During a blackout, a regular phone is kept in service by the current supplied through the phone line. This is not possible with IP phones, therefore, when power ceases, there is no VOIP phone service. In order to use VoIP during a power outage, an uninterruptible power supply or a generator should be installed on the premises.

Emergency calls

Another major concern with VOIP involves emergency calls. Traditional phone equipment can trace one's location. Emergency calls are diverted to the nearest callcenter where the operator can see the location in case one cannot talk. However, because a voice-over-IP call is essentially a transfer of data between two IP addresses, not physical addresses, with VOIP there is currently no way to determine from where a VOIP phone call originates.

Although several companies are making an effort to provide for emergency calls in their service, this issue remains an important deterrent against VoIP.

Reliability

Because VOIP relies on an Internet connection, one's VOIP service will be affected by the quality and reliability of one's broadband Internet service and sometimes by limitations of one's PC. Poor Internet connections and congestion can result in garbled or distorted voice quality.

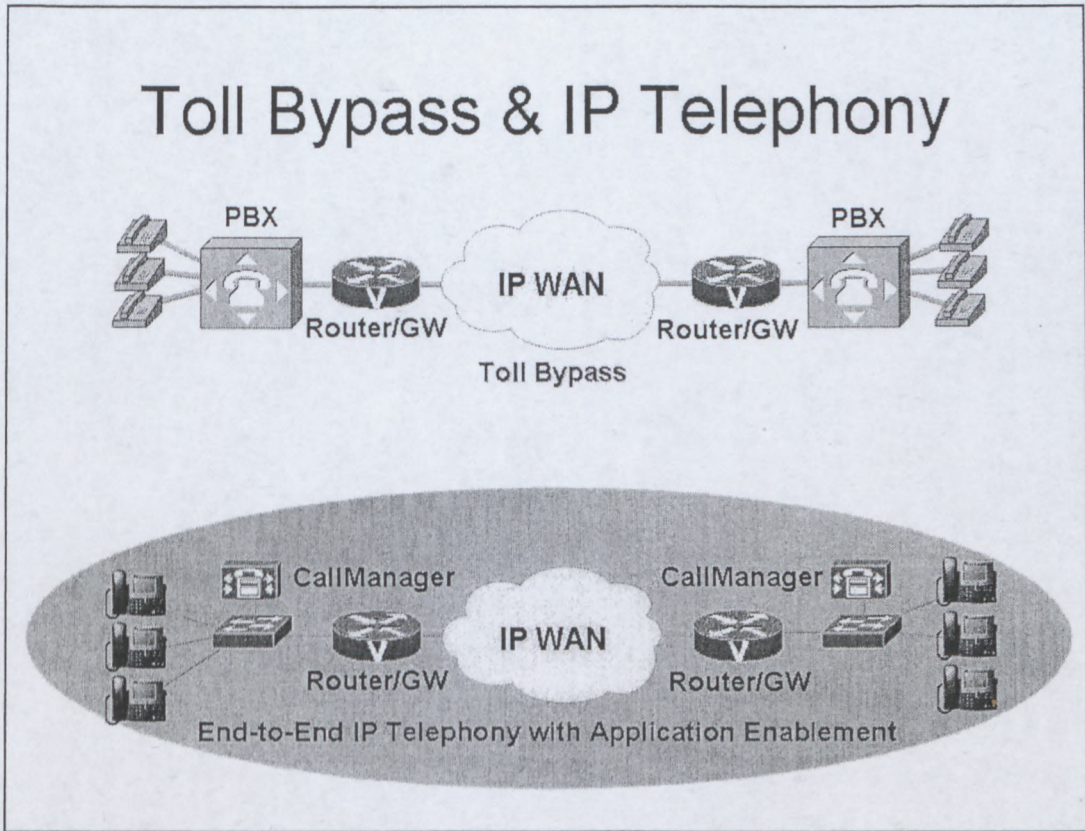
In order for callcentres to obtain value from this solution, they should purchase a high capacity of broadband. If the bandwidth is not sufficient, voice quality of the calls will deteriorate dramatically.

Security

Security is a main concern with VoIP, as it is with other Internet technologies. The most prominent security issues regarding VoIP are identity and service theft, viruses and malware, denial of service, spamming, call tampering and phishing attacks.

All security concerns can be mitigated by installing effective security software, as well as anti virus and firewall to protect one's network. Figure 5.1 below is an example of VoIP architect. The picture is borrowed from www.realtimecomms.edu.au.

Figure 5.1



5.3 Conclusion

The outcome of the research supports the literature review. Based on the literature review and the research findings, it is apparent that there should be a change of policy from the South African Government with regard to the telecommunications sector. The policy change should be about reducing the current price of telecommunications, which will stimulate growth of the callcentre industry and also attract foreign direct investment to the callcentre industry.

According to the research results, high telecommunications costs is the highest single contributor to slowing down growth of the callcentre industry. Reducing costs of telecommunications alone might not be an ultimatum solution. Callcentre owners should also consider new technology to find ways to obtain more for less, for example use of VoIP. VoIP promises to be a solution to high telecommunications costs problems. Callcentres will have to contact VoIP service providers and conduct a full analysis of the product to decide if it will help them to reduce their operations costs and increase their profit.

If high telecommunications costs problem is addressed, not only will the callcentre industry benefit, but South Africa, as a whole, will benefit through job creation and poverty alleviation as well.

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GLOSSARY OF TERMS

AGENT	Refers to an individual in a callcentre or business processing operation whose job is to perform the actual work involved. In a contact centre context, it means people who liaise directly with customers
BPO&O	Business Process Outsourcing and Offshoring is movement of certain voice and non-voice businesses process to cheaper countries, often within the developing world.
CALLING THE CAPE	The trading name of the Cape Town callcentre development association and is a section 21 not for Gain Company, which is responsible for developing contact centres and the BPO&O industry in the Western Cape.
CAPTIVE	A contract or business processing centre that is owned and managed by the organisation for whom services are provided.
CBD	Central Business District (Cape Town in this case)
FDI	Foreign Direct Investment, is when foreign countries invest money or resources in the South African economy.

ICASA	Independent Communications Authority of South Africa, is the South African telecommunications and broadcasting regulator.
INBOUND	Communication traffic that originates from customers and is received by agents in a callcentre; also refers to centres that handle such work. An example is technical support calls.
LCR	Least Costs Router is interface equipment between Telkom network and a cellular network. It helps to reduce the costs of calling cellular phones from a Telkom line.
OUTBOUND	Communication traffic that originates from agents in a callcentre and is received by customers; also refers to centres that handle such work. An example is direct sales calls.
ONSHORE	In the context of BPO&O, it refers to business processes that are performed within their home jurisdiction.
OFFSHORE	In the context of BPO&O, it refers to business processes that are handled outside of their home jurisdiction.

OUTSOURCE

In the context of BPO&O, this refers to management of business processes by a third party organisation rather than directly by employees of the company that owns the business process.

VOIP

Voice Over Internet Protocol is technology that allows voice traffic to be carried via a data line.

Appendix A

Research Questionnaire

Impact of high telecommunications costs on the callcentre industry in Cape Town, South Africa

Robson Mpande Ngobeni

Institution: Cape Peninsula University of Technology

Student Number: 204212952

Cell: 084 777 7082

Email: nrobson@webmail.co.za

The purpose of this survey is to complete a Masters Degree thesis for the above student. The research aims to measure the impact of high telecommunications costs within the callcentre industry in Cape Town.

Information gathered for this survey will not be distributed or used for any other purpose other than for the thesis.

Kindly complete your details below before attending to the questionnaire. The questionnaire should take no longer than five minutes to complete. After completing the questionnaire, please email back to robson.ngobeni@za.pwc.com or fax to (011) 209 5683.

Note: you reserve the right to keep your company name anonymous, but it will be helpful to have your contact details so that we can share with you the final results of this research.

Callcentre Name:.....

Name/Surname of the participant:

Position:.....

Email address:.....

Tel (work):.....

Date:.....

Please take a moment and complete the questions below. Mark the appropriate box with an x. A list of abbreviations is attached for your convenience.

Background information

1. What type of callcentre do you operate?

Inbound		Outbound		Both	
---------	--	----------	--	------	--

2. What is your target market?

Onshore		Offshore		Both	
---------	--	----------	--	------	--

3. How many seats does your callcentre have?

0 - 50		50 - 100		100 plus	
--------	--	----------	--	----------	--

4. How old is your callcentre?

0 - 3 years		3 - 5 years		5 and above	
-------------	--	-------------	--	-------------	--

Sales information

5. On average, how long does an agent spend on a call for a successful sale?

0 - 5 min		5 - 10 min		10 and above	
-----------	--	------------	--	--------------	--

6. On average, how long does an agent spend on a call for an unsuccessful sale?

0 - 5 min	5 -10 min	10 and above	
-----------	-----------	--------------	--

7. How many hours a day does your callcentre operate?

0 - 8 hours	8 -16 hours	16 - 24 hours	
-------------	-------------	---------------	--

8. Please indicate which day(s) of the weekend you operate?

Saturday	Sunday	Closed both days	
----------	--------	------------------	--

Telecommunications expenditure

9. What percentage of average monthly revenue constitutes operational costs?

1 - 10%	10 - 20%	20 - 30%	30 - 40%	x	40 - 50%	More than 50%	
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10. What percentage of operating costs on average, do telephone calls constitutes per month?

0 - 25%	25 - 50%	More than 50%	
---------	----------	---------------	--

Growth

11. What, in your opinion, slows growth of the callcentre industry in Cape Town?

High telephone	Skills shortages	Strict Government regulations	All	
----------------	------------------	-------------------------------	-----	--

call prices							
-------------	--	--	--	--	--	--	--

Technology

12. Which call option does your callcentre use? Tick the appropriate box below.

Telkom	
Neotel	
LCR	
VOIP	
Telkom and LCR	
Telkom and VOIP	
LCR and VOIP	
International package	

Insight questions

Below is a list of statements regarding the South African Telecommunications industry. Please indicate in the grid below to what extent you agree or disagree with the following statements.

Statement	Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly
13. I am happy with current telecommunications prices in South Africa.				
14. The South African Government does sufficient to reduce telecommunications costs.				
15. Current telecommunications costs are favorable to the growth of the callcentre industry				
16. Telecommunications costs negatively affect the number of agents that you employ.				
17. Telecommunications prices are good enough to attract foreign investors to the callcentre industry.				
18. VOIP is an answer to high telecommunications costs.				
19. South African bandwidth is adequately priced for the growth of VOIP.				
20. LCR's are an answer to high telecommunications costs.				

21. LCR's are adequately priced to support growth of the callcentre industry				
--	--	--	--	--

Please answer Yes or No to the two statements below.

Statement	YES	NO
22. Do you know of any callcentre that closed down as a result of high telecommunications costs?		
23. Have you ever lost business to a foreign country as a result of high telecommunications costs?		

Thank you for your contribution. If you have additional comments to make about the costs of telecommunications in South Africa, you can use a separate piece of paper and attach it to your completed survey. Your comments will be of utmost importance to the success of this survey.

Glossary of Terms

<i>ICASA</i>	Independent Communications Authority of South Africa. The South African telecommunications and broadcasting regulator.
<i>FDI</i>	Foreign Direct Investment.
<i>VOIP</i>	Voice Over Internet Protocol.
<i>LCR</i>	Least Costs Router.
<i>BPO</i>	Business Process Outsourcing.
<i>Offshore</i>	A business operating outside the borders of South Africa.
<i>Agent</i>	A callcentre employee who operates telephone calls.

