THE EFFECTIVENESS OF THE CALL CENTRE IN MANAGING CUSTOMERS AND THEIR NEEDS

By

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A dissertation submitted in fulfillment of the requirements for the degree of Philosophy Doctorate in Marketing in the Faculty of Management Studies

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October 2012
DECLARATION

1 Devina Oodith declare that

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Signed: .........................
ACKNOWLEDGEMENTS

I wish to give thanks to God for granting me the Wisdom and Courage to get to this point in my academic journey. Through his guidance and grace I pray to be able to successfully continue on this journey of knowledge and exploration.

I would also like to express my sincere gratitude to my parents for their unfailing support and for constantly stressing the importance of an education and the need for self-improvement. This achievement would not have been possible without your love and guidance.

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To the participating organisation, the call centre agents and customers that responded to my questionnaires, I wish to thank you for your participation in making the study possible.
DEDICATION

This study is dedicated to my dearest mum Mrs S Oodith

AND

It is dedicated in loving memory of my late dad

Mr Devpersadh Oodith
ABSTRACT

Since customer service has become a key ingredient in cementing relationships, customer call centres have emerged as a tool for improving greater customer satisfaction. The aim of the study is to investigate the service environment within the call centre of the organisation and to explore the extent to which both call centre agents and customers perceive the dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome, Customers) as having the potential to influence call centre effectiveness. The target institution selected is a Public sector service organisation that is an incoming call centre.

In terms of the sample size of the study a sample of 151 call centre agents and 220 customers was drawn for the study using the cluster sampling and simple random sampling techniques respectively. A probability sampling technique was used to ensure greater generalisation of results. A separate questionnaire was administered to both sets of samples respectively; which comprised of 5 sections each. Section A pertained to the biographical details of respondents while Sections B through to E pertained to questions relating to the sub-dimensions of the study. The Validity and Reliability of the questionnaire was assessed using Factor Analysis and Cronbach’s Coefficient Alpha respectively. Descriptive and Inferential statistics were used to generate the results of the study.

This study revealed that customer relationship management and services marketing are the cornerstone in today’s fast paced business world and failure by a business to embrace these concepts can cause firms to lose valuable customers in the future. The results of the study reflect that both agents and customers perceive that the dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) have the potential to significantly influence call centre effectiveness. Call Centres are indeed very powerful tools in forging strong ties between a firm and its customers but proper management and control is critical to this relationship. Based on the results of the study, a model comprising of critical recommendations has been compiled for practioners and other stakeholders which when implemented has the potential to enhance call centre effectiveness.
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CHAPTER ONE
Introduction and Overview of the Study

1.1 Introduction
A customer call centre can be defined as a voice operation centre that interfaces with a customer in a variety of ways from customer support, billing, and provisioning, to directory assistance and technical assistance (Jack et al., 2006). While call centres can potentially contribute to customer satisfaction and retention, many organisations fail to gain the maximum strategic value out of their call centre operations (Mahesh & Kasturi, 2006).

In recent years, the service sector has undergone extreme changes in the workplace and many companies have linked their information technology advances with telecommunications to reinvent their customer service activities and sales via the call and contact centres (Little & Dean, 2006). Call centres have received negative publicity concerning how they are managed, coming under criticism from researchers for management being too concerned about emphasising efficiency goals and productivity targets; hence, frequently subjecting employees to high levels of monitoring and creating extremely stressful working environments (Little & Dean, 2006).

Many organisations commit a great deal of time and resources to customer satisfaction. Delivering superior services and ensuring a higher customer satisfaction have become strategic necessities for companies to survive in a competitive and ever changing business environment (Reichheld & Sasser, 1990). Due to the negative consequences caused by dissatisfied customers, firms are now making management more accountable for ensuring greater customer satisfaction (Szymanski & Henard, 2001).

Customer call centres have emerged as a tool for improving greater customer satisfaction. Firms are using call centres for establishing direct communication with their customers with the primary aim of fostering greater customer care and achieving higher levels of customer satisfaction (Jaiswal, 2008). Call centres are playing a key role in customer relationship management and firms see it as an effective way of keeping customers happy and satisfied.
whilst at the same time gaining a competitive advantage. With an effective customer measurement and management system in place it is possible to create organisational value. Customer service is very important in cementing relationships. Marketing is concerned with the exchange between the firm and its customers and the quality and customer service and key linkages in these relationships. The relationship marketing’s view is that the customer gives loyalty in exchange for their expectation that value will flow to them from the relationship (Christopher, Payne & Ballantyne, 2002).

Customer satisfaction is the customer’s feelings that a provider has met or exceeded a customer’s expectations. Firms that have a reputation for delivering high levels of customer satisfaction generally do things differently from competitors. Building relationships with customers requires that all employees in a firm work together to provide customer value or else the long term relationship with the customer is threatened especially during complaints. Central to effective management of customer service has to be the issue of service quality performance. Service quality is the ability of the firm to meet or exceed customer expectations (Brink & Berndt, 2008).

1.2 Background to the Study
Customer call centres have become the latest trend in South Africa in terms of the way businesses interface with their customers. There has been a marked increase in call centre operations throughout the country with many call centres outsourcing their services to large organisations while at the same time many large firms that have the capacity to do so, still opt to provide their own in-house call centre operations. The call centre industry has provided employment opportunities for a large number of people; however, the call centre has been criticised in the literature for the stressful environment and the high labour turnover that it creates. It is not an environment that requires a considerable amount of training and expertise to gain entry into and offers an average salary.

Many organisations on the other hand have been constantly struggling to successfully manage their customer interactions with them via these call centres. These firms need to focus on the importance of the customer and the experiences that the firm wishes to engineer
for them as they move through the service process toward the desired service outcome. Since this service involves contact between customers and call centre agents, the firm will need to develop strategies to manage employees in ways that will strategically recognise loyal, skilled, motivated employees who can work well to garner a competitive advantage (Lovelock & Wirtz, 2007).

1.3 Focus of the Study
The research aims to investigate the service environment within the call centre of the organisation and to explore the extent to which both call centre agents and customers perceive the dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome, Customers) having the potential to influence call centre effectiveness. The extent to which the biographical variables of call centre agents (age, race, gender, employment status, tenure, educational qualification) and customers (age, race, gender, educational qualification) influences their perceptions of the dimensions of call centre effectiveness is also probed. In addition, the prevalence and magnitude of the operational variables of the call centre (number of calls taken per day, average call waiting time, call abandonment rates, call talk time, call wrap-up time, time taken in queue before a call is answered) is also explored.

1.4 Motivation for the Study
Theron, Bothma and Du Toit (2003) noted a marked increase in call centres in South Africa but also noted a shortage of people skills needed to implement and run such centres together with the database technologies required to offer customer personalisation.

When customers dial the call centre they are first greeted by the Interactive Voice Response (IVR) facility welcoming them to the company’s call centre. The IVR then informs customers to be patient in waiting for the next available call centre agent. This waiting is often tedious and frustrating for customers as many of the self-help options offered to customers are often not very helpful, forcing customers to hold on the line and wait for an agent.
Most often, after a lengthy waiting period, customers encounter agents that are ill informed, lack the necessary skills to address their query or complaint or are transferred to another agent or supervisor leading to further delays and frustration. These perceived gaps in service delivery often lead to service failure and great levels of customer dissatisfaction and disloyalty. The burning question is how can firms address the issues of proper call centre management coupled with proper customer care to facilitate and enhance the customers’ overall experience with the firm and enhance and foster stronger customer relations.

1.5 Objectives of the Study
The research is a quantitative, cross-sectional study that examines the effectiveness of the call centre in managing customers and their needs. It undertakes this assessment from the perspective of the call centre agent and the customer respectively and includes the following:

- To conduct a literature review on the key dimensions of the study relating to the service environment of the organisation, service excellence and the importance of technology and infrastructure whilst taking cognisance of and managing customers and their needs.
- To assess the current nature of the service environment within the call centre.
- To examine and evaluate whether there is a significant difference in the perceptions of call centre agents and customers regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) respectively.
- To examine the perceptions of call centre agents and customers varying in biographical profiles (gender, age, race, tenure, educational qualifications, employment status) regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service).
- To examine the perceptions of call centre agents varying in operational measures (number of calls taken per day, average call waiting time, call abandonment rates, call talk time, call wrap-up time, time taken in queue before call is answered) regarding the dimensions that influence the effectiveness of service delivery in the call centre.
To examine the perceptions of customers regarding the dimensions that influence the effectiveness of service delivery in the call centre based on varying operational measures.

To assess the extent to which the dimensions of the study (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) influence call centre effectiveness.

1.6 Hypotheses
The following hypotheses have been generated for this study.

Hypothesis 1:
There exists significant intercorrelations amongst the perceptions of call centre agents and customers regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) respectively.

Hypothesis 2:
There is a significant difference in the perceptions of call centre agents and customers regarding the dimensions that influence the effectiveness of service delivery in the call centre.

Hypothesis 3:
There is a significant difference in the perceptions of call centre agents and customers varying in biographical profiles (gender, age, race, tenure, educational qualifications, employment status) regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service).

Hypothesis 4:
There is a significant difference in the perceptions of call centre agents varying in operational measures (number of calls taken per day, average call waiting time, call abandonment rates, call talk time, call wrap-up time, time taken in queue before call is
answered) regarding the dimensions that influence the effectiveness of service delivery in the call centre.

**Hypothesis 5:**
There is a significant difference in the perceptions of customers regarding the dimensions that influence the effectiveness of service delivery in the call centre based on varying operational measures.

**Hypothesis 6:**
The dimensions of the study (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) significantly account for the variance in determining call centre effectiveness.

1.7 Limitations of the Study
The following limitations of the study are acknowledged:

- The study was undertaken within a large public sector organisation; hence, the results cannot readily be generalised to other private sector companies.
- In terms of customer questionnaires only online consumers were e-mailed the electronic questionnaire for participation due to time constraints. A large majority of consumers did not have access to e-mail and hence could not participate in this study and were excluded causing a systematic bias.
- Due to time constraints it was not possible to make follow up calls to attract a better response rate from call centre agents and customers, respectively. However, sampling adequacy and tests of Sphericity were statistically conducted and indicated suitability, adequacy and significance.

1.8 Summary Outline
The following is a brief structure and breakdown of the various chapters in the dissertation.

- **Chapter 1** introduces the topic that is being investigated by providing an overview of the study, the focus, motivation, objectives, limitations and a chapter by chapter overview of the study.
Chapter 2 which is the first of the three literature review chapters introduces the service environment of an organisation. This chapter delves into the characteristics of services, the importance of the services marketing mix, a definition of customer service and the discussion of the customer focused environment. The importance and elements of the service culture is then highlighted. In addition, the SERVQUAL model is critically analysed exploring its operation, the strengths and weaknesses of the model as well as criticisms of the Gaps model. The chapter closes by examining the role of customer relationship management within the context of a call centre.

Chapter 3 elucidates the requirements for service excellence. Strategies for influencing customer perceptions are analysed together with the importance of listening to the customer. The focus then shifts to the commandments of customer service. The sub-dimensions of human resources (selection, skills, motivation, training, empowerment and burnout, team building and team coaching) is then discussed in detail followed by the sub-dimension of customers (decision-making, components of customer expectations, customer perceptions of services, customer satisfaction, service delivery failure, responses to failure, waiting lines, customer service recovery and strategies for recovery, customer retention and customer loyalty).

Chapter 4 which is the final chapter in the three part literature review discusses the sub-dimension of technology and infrastructure/sick building syndrome. The different modes of technology, its role in the service encounter and the importance of internet services are assessed. The importance of web-based E-service is then analysed together with tips to grow E-service effectiveness. Thereafter, the different types of technology adopted in the call centre are presented to analyse ease of use and efficiency. In terms of sick building syndrome, the chapter explores what it is, its causes and its effects on worker performance. Possible solutions to reduce sick building syndrome are evaluated.

Chapter 5 discusses the research methodology to be implemented in the study. This chapter contextualizes the background of the study and the objectives. It also introduces the research design and procedure to be adopted by describing the sampling framework,
data collection instrument and methods as well as data analysis techniques to be adopted during this study.

- **Chapter 6** presents the results of the study using tabular and graphical representations for both the sample groups. The findings and relationships are highlighted per group under the headings of descriptive statistics and inferential statistics and key focus areas.

- **Chapter 7** discusses the results of the study subject to interpretative analysis and is documented in terms of the objectives of the study. To contribute to the value of the study, the findings are compared and contrasted to results reported by other researchers in the field that studied along similar paradigms to this study.

- **Chapter 8** brings this study to a close by providing a pictorial overview of the study, highlighting the main findings of the research, obstacles to call centre effectiveness and making recommendations accordingly which when implemented have the potential to enhance call centre effectiveness. In addition, recommendations for future research that will serve to further contribute to attaining call centre effectiveness and overcome the shortcomings in the research design will also be highlighted.

**1.9 Conclusion**

This chapter has introduced the study and has given an overview of what the study aspires to achieve. It has outlined the objectives and hypotheses, limitations of the study as well as the summary outline of each chapter in order to emphasize the jurisdiction and boundaries of the study in terms of call centre effectiveness. The next three chapters focus on an intensive discussion on the literature surrounding Services marketing and the importance of customer relationship management in this process.
CHAPTER TWO
The Service Environment of an Organisation

2.1 Introduction
Recent trends have displayed an increasing interest in the areas of services and services marketing (Hoffman & Bateson, 2006). Developing customer loyalty and building strong relationships is the central theme in managing customer markets (Donaldson & O’Toole, 2002). This research aims to evaluate the effectiveness of a call centre in handling customer complaints through improving the quality of service that is delivered to the customer and in so doing, to develop and foster strong relationships between the business and its customers. One of the key underlying principles in marketing is that every business should strive to retain and maintain a good relationship with existing customers as embarking on strategies to continually attract new customers to a business is often extremely expensive and very time consuming. There has been a mushrooming of call centres in many large business organisations, which serve as a means of communication between the firm and its customers but the question that is on everyone’s lips is whether this is in fact an effective means of doing so.

This chapter will introduce a general background into the nature of services within an organisation. It aims to highlight the underlying components that constitute a proper service offering. The chapter also focuses on the potential gaps between expected and perceived services offered by an organisation to its consumers and how these gaps can be overcome to improve customer satisfaction.

2.2 Characteristics of Services compared to Goods
The following characteristics, discussed below, highlight what a proper service constitutes and explains how service offerings are different from goods being offered for sale. It is clear that services tend to be more complicated and requires a greater degree of skill and effort. The characteristics of services are:-

- Intangibility: This is one of the dominant characteristics of any service (Gabbott & Hogg, 1998). Since services are performances of actions they cannot be felt, tasted or
touched as one would be able to do with a tangible product (Zeithaml et al., 2006). Services cannot be readily displayed as it is not easily communicated to customers, which makes comparisons of quality difficult to assess.

- **Heterogeneity:** Services are primarily produced by people so no two services are likely to be the same. Heterogeneity also arises as two customers are never similar. The employee responsible for delivering the service frequently may also differ in their performance daily. Hence, the quality of the service is extremely variable (Zeithaml et al., 2006). Quality can be dependent on variables beyond the control of the service supplier, for example, the ability of consumers to articulate their needs, or the willingness of personnel to satisfy those needs and the level of demand for services. These complicating factors may cause a difference in the quality of services offered to consumers.

- **Inseparability:** According to Zeithaml et al. (2006), goods tend to be produced first, then they are sold and finally consumed; however, services differ in that they are sold first and produced and consumed at the same time. Hence, the quality of service and customer satisfaction is dependent on real time occurrences inclusive of the actions of staff and their interaction with the customer.

- **Perishability:** Services cannot be inventoried since they are performed in real time (Rust, Zahorik, Keiningham, 1996). Busy periods cannot be prepared for early on by producing and storing services, nor can they be catered for after the fact. Therefore, forecasting and planning for capacity utilisation are critical. As there are no return policies on services the firm must have a strong service recovery strategy in place when things go wrong.

Traditionally, in marketing one is always exposed to literature on the components of the marketing mix which is made up of the four p’s of price, place, product and promotion. Sound marketing strategies are built on the fundamentals of the four p’s. However, in services marketing there has been a refinement to the marketing mix.
2.3 The Services Marketing Mix
The traditional marketing mix, made up of the 4 p’s, constitute the total offering to consumers. The 4 p’s according to Lamb et al., (2000) are the product (the basic service or good, including packaging), its price, the place (where the product is made available to the consumer or the distribution channels) and promotion (marketing communication, advertising, public relations and personal selling). According to Rust et al., (1996), managers have found that the traditional 4 p’s of marketing do not adequately describe the key aspects required to carry out the job of a service employee.

Zeithaml et al. (2006) suggest that the unique requirements of selling services require the addition of 3 more p’s:

- **People**: In administering a service personal interaction between customers and employees is required as these interactions affect the customers’ perception of service quality. Friendliness, knowledgeability and helpfulness can have a direct impact on the customers’ perception of service quality (Rust et al., 1996). Therefore, human resource management policies and practices are considered to be of high importance when delivering quality services.

- **Process**: Zeithaml et al. (2006, p. 27) define process as “the actual procedures, mechanisms, and flow of activities by which the service is delivered – the service delivery and operating systems”. The actual delivery of the service gives customers a framework on which to assess the service (Lovelock, 2001).

- **Physical evidence**: Zeithaml et al. (2006, p. 27) best describe physical evidence as “the environment in which the service is delivered and where the firm and customer interact, and any tangible components that facilitate performance or communication of the service”. This can include tangible representations such as brochures, letterheads and business cards. It can also include the physical facilities where the service is executed – namely the servicescape. In other cases like the call centre for example, the physical facility is irrelevant for the customer.
The three new marketing mix elements are depicted in the marketing mix as independent elements (Figure 2.1) as they are within the control of the firm and because they influence the customers’ initial decision to purchase a service as well as the customers’ level of satisfaction and repurchase decision (Lovelock & Wirtz, 2004).

Figure 2.1
The Expanded Marketing Mix for Services

In addition to the seven P’s of services marketing there is also a four R model in marketing comprising of research, recognition, reputation and relationship. Any marketing that a firm does should focus on at least one or more of these R’s.

- **Research**: Since research is often very expensive many firms fail to conduct any form of research activity. However, there are a number of cost and time effective research strategies that can be carried out such as customer surveys, interviews and secondary research.

- **Recognition**: Awareness of a firm in the markets they serve is critical for success. Mechanisms to create recognition include company logo, brochures, web sites and branded merchandise.

- **Reputation**: A good reputation is important and it is the lifeblood of a service firm. Reputation is a key indicator of quality and trustworthiness. Word-of-mouth communications, customer testimonials and stories help spread the word.

- **Relationship**: Relationships between the firm and their customers, suppliers, employees and the community at large are important to its ability to succeed. Some examples that enhance relationships include an employee newsletter, sales training tools and materials for channel partners and social events for customers (4 – R Marketing LLC, 2009).

### 2.4 Defining Customer Service

Lucas (2005: p. 4) defines customer service as “the ability of knowledgeable, capable, and enthusiastic employees to deliver products and services to their internal and external customers in a manner that satisfies identified and unidentified needs and ultimately results in positive word-of-mouth publicity and return business”.

A critical marketing activity is developing products and services that are able to satisfy consumers’ needs and wants. Consumer research is able to provide answers to what a consumer is looking for in terms of the core product attributes, the advertising media that are likely to have the greatest impact, as well as prices of the product (Hoyer & MacInnis, 2001).
According to Lucas (2005), there has been a shift to the service economy and some of the factors contributing to this are the increased efficiency in technology where activities like telemarketing and internet shopping has evolved and continues to expand. Some of the societal factors include more women entering the workforce giving rise to changes in their traditional roles; hence, there is a need for the tasks provided by housewives to now be provided by service providers. In South Africa there is a more diverse population entering the workforce bringing with them new ideas, values, needs and expectations of the needs of the groups that they represent.

Lucas (2005) also found that customers have a greater desire to use their leisure time more efficiently, and with dual income families there is a greater degree of disposable income available to demand services such as dog walker’s, garden services and laundry services among others. Education also impacts hugely on customer service as customers are well informed on price, quality and value of products and services and therefore, have a high expectation of the quality of service received. The last decade has also seen a drastic growth in E-commerce and the way customers conduct business via the internet from shopping to surfing the net for information on goods and services. This trend has placed an increasing demand on the creators of these innovative sites to provide a greater degree of customer service to customers without physically coming into contact with a customer. Some examples of successful companies include eBay and Amazon.com which are used by millions of customers yearly.

The components of the customer service environment, which according to Lucas (2005) should be the responsibility of every member of the firm not just the customer service representatives, needs to be explored.

2.5 The Customer Service Environment

The components of the customer focused environment consist of organisational culture, human resources, product deliverables, delivery systems and finally service.
Figure 2.2 illustrates the different components of a customer-focused environment as identified by Lucas (2005).

**Figure 2.2**

Components of a Customer-Focused Environment


*The Customer*

The key component in a customer-focused environment is the customer, as all aspects of the service organisation tend to revolve around the customer. The customer is the heartbeat of the organisation and without him or her there is no reason for the business to operate. Listening to customers and observing their behaviour enables a firm to meet their customers’ needs (Cant, Brink & Brijball, 2006). There are two types of customers namely, internal and external customers. Internal customers can include co-workers, employees from other departments or branches and other people who work within the same organisation (Lucas,
External customers may be current or potential customers or clients and they are the people who actively seek out the products or services offered by the organisation.

Organisational Culture
Lucas (2005) defines the organisational culture as the experiences encountered by the customer. Organisational culture is made up of a collection of subcomponents, each of which contributes largely to the service environment. There must be cultural compatibility and firms should not impose their culture on customers or partner firms (Donaldson & O’Toole, 2002).

Human resources
In order for firms to operate optimally they must take great care in recruiting, selecting and training qualified people; hence, their human resources function becomes critical. Without motivated, competent workers, planning policy and procedure change or systems adaptation will not make a difference in customer service. Employees who are skilled, motivated and enthusiastic about providing service excellence are hard to find and are appreciated by employers and customers (Lucas, 2005). Face-to-face encounters are central to service delivery (Gabbott & Hogg, 1998). One of the eight principles of “Batho Pele” stresses the need for courtesy by staff in interacting with customers. This principle goes beyond the need for a ‘smile’ or a ‘thank you’ and requires service providers to be courteous and respectable at all times (The Department of Public Service and Administration, 2001).

Products / Deliverables
The product / deliverables may be a tangible item manufactured and distributed by the company (Lucas, 2005). However, there are two areas of customer satisfaction or dissatisfaction, namely, quality and quantity.

If customers receive what they perceive as a quality product or service to the level that they expected, and in the time frame promised they will likely be satisfied. But if the product sold was inferior or the service provided was perceived as being of an inferior quality then that customer will be dissatisfied (Zeithaml & Bitner, 2003). Government’s principle of “Batho
Pele” reiterates that setting service standard principles is very important and customers need to be included in this process in order to establish acceptable benchmarks against which service delivery will be measured (The Department of Public Service and Administration, 2001).

❖ Delivery Systems

In deciding on an appropriate method of delivery to adopt Lucas (2005) suggests that the following should be taken into consideration:

✓ Industry standards: How are competitors currently delivering and are the firms’ current delivery standards in line with those of our competitors?
✓ Customer expectations: Do our customers expect delivery to occur in a certain manner within a specified time frame? Are alternatives available?
✓ Capabilities: Do existing or available systems within the firm and industry allow for a variety of delivery methods?
✓ Costs: Will providing a variety of techniques add real value or perceived value at an acceptable cost? If there are additional costs, will consumers be willing to absorb them?
✓ Current and Projected requirements: Are existing methods of delivery, such as mail, phone and face-to-face services meeting the needs of the customers presently and will they continue to do so in the future?

An analysis of the delivery systems serves as an indicator of what standards the firm should be aspiring to attain. It also provides insight into what competitors are doing and provides a framework on what measures need to be put into place to improve the existing resources in order to provide a better level of service.

❖ Service

Service is the manner in which the employer and employees treat the customers and each other as they deliver their product(s) or other deliverables. Employees are thus, privileged as they mediate between the firm and its customers (Gabbott & Hogg, 1998). Many firms provide training for front-line staff to be able to service the customer such as telephone etiquette, complaint handling, coping skills when dealing with confrontational customers and comprehensive manuals equipping staff with sufficient information to be able to resolve
queries or complaints on the first call. As a means of motivating staff to continually give off their best at all times firms provide incentive bonuses in recognition of outstanding work by their employees.

2.6 Service Culture

A culture includes the values, beliefs, norms, rituals and practices of a group or firm. Any policy, procedure, action or inaction on the part of the firm will contribute to the service culture (Lamb et al., 2000; Lucas, 2005).

Figure 2.3 illustrates the typical elements of a service culture as depicted by Lucas (2005). Management has the responsibility of communicating the culture of the firm to its customers. Culture may be communicated through one’s appearance, interaction with customers and knowledge, skill and general attitude to one’s customers. For example, Nedbank has instilled a new aspect of commitment to service whereby the customer only needs to ask once in order for a banking query to be resolved. If this undertaking is not met then as a show of commitment to their pledge they will donate R50 to a charity (Nedbank, 2009).

However, firms that adopt a more adversarial method of dealing with customers may find it difficult to change to a relationship approach thus placing strain on their relationship with customers (Donaldson & O’Toole, 2002).

According to Zeithaml & Bitner (2003), companies such as IBM, FedEx, AT&T and Disney took years of consistent, concerted effort to build a service culture and to move the firm from its old ways to new ways of doing business. They argue that it takes hundreds of little, but significant, things to build and sustain a service culture not just one or two large things. Toyota South Africa awarded TrenStar South Africa with the ‘best service supplier award in 2005’ for their outstanding service delivery. Eskom has also been awarded for being the most caring company in South Africa and has been amongst the top 4 companies since 2004.
Many elements define a successful organisation. Some of the more common elements defined by Lucas (2005) are depicted in Figure 2.3.

**Figure 2.3**

**Elements of a service culture**


**2.6.1 Service philosophy or mission**

The service philosophy or mission of the firm is generally driven from the top of the organisation. The vision or tone and direction are determined by top management and the board of directors. Without a clearly planned and communicated vision, many firms stumble due to indecision at this level. Leadership is critical to service success and members of top management must make themselves available to frontline employees and be in tune with the needs and expectations of customers as it is these frontline staff that are ultimately responsible for delivering to the customer (Gabbott & Hogg, 1998; Lucas, 2005; Zeithaml & Bitner, 2003). There have been other views though, that argue that the vision of the organisation should not rest purely with top management and that this process should be shared amongst all employees of the organisation with the aim of improving service
delivery. Pick n Pay’s retail division have also embraced a set of new strategic issues such as promoting energy efficiency in their stores through partnerships with Eskom’s demand side management program, and developing the skills of employees at the shop floor level through focused training programs. These service philosophies will now be channelled down to the relevant departments to be put into practice at the various levels in the organisation.

2.6.2 Employee Roles and Expectations
Employee roles may be similar from one firm to the next but they can be performed in a variety of different ways. Such roles and expectations should be included in job descriptions and performance goals. As far as goals are concerned one is measured against them during a performance period and subsequently rewarded or not depending on one’s performance and organisational policy (Gabbott & Hogg, 1998). The failure to deliver by employees can be attributed to factors such as role conflict, role ambiguity, poor job fit and inappropriate compensation systems (Zeithaml & Bitner, 2003).

Lucas (2005) states that for organisations to be a success in providing superior service to customers, roles and expectations must be clearly defined and communicated in terms of the following characteristics to which he refers as ‘RUMBA’ (realistic, understandable, measurable, believable, attainable).

- **Realistic**: Behaviour and responsibilities must be in line with the reality of the workplace and customer base. Although it is possible to transfer a standard of performance from one firm or industry to another, modifications may be necessary to fit the situation. For instance, is it realistic to handle all customer calls within a specific time period? Managers may set specific “talk time” goals for each call centre agent; however, it may not always be possible to address a customer’s needs within this specified time. So management is urged to be realistic when setting up such goals for employees to work within (Lucas, 2005).

- **Understandable**: A sound understanding of performance goals is needed to facilitate appropriate and effective behaviour (Lovelock & Wirtz, 2004). For employees to
function at their best within a call centre, all agents need to be familiar with the rules and regulations of the firm as well as what their daily targets need to be in terms of for instance calls handled per agent per day, or sales level targets at the end of each month.

- **Measurable:** In a purely customer focused environment, service measurement can be evaluated based on factors like talk time on the telephone, number of customers effectively served, customer feedback surveys and satisfaction cards, and letters or other written correspondence or on the negative side by customer complaints. It is important to know what the acceptable levels are and to strive to meet or even exceed these levels. Many companies such as Consumer Credit have internal memos that are circulated within their call centre’s reporting on customer feedback or customer compliments commending agents for outstanding performance. Team leaders also receive information daily on factors such as number of customers effectively served and number of calls received by agents in their teams to be able to measure performance at all times.

- **Believable:** For any goal to be attained, it must be believable to the people that will strive to reach it and to supervisors who will monitor it (Lamb *et al.*, 2004).

- **Attainable:** Given the right training, management support and organisational environment in which the tools, information, assistance and rewards are provided, one can attain one’s goals. Customers should also expect that products and services for which they are paid for are delivered when promised, in the manner agreed upon, and without inconvenience to them. Anything less is unacceptable and is poor service (Lucas, 2005).

### 2.6.3 Policies and Procedures

Policies and procedures are often put into place as a guideline within which the organisation will operate. These policies may enhance services as the firm has undertaken certain principles and are obliged to honour such principles, for example, firms undertaking to beat any written quotes for a service may tout this to their customers but as soon as the customer queries this, the firm reneges on their promise. Flexibility in dealing with customers is
important to be able to better serve a customer. However, policies serve as a proper guideline within which a firm has to operate. The goal of every manager should be to process customer requests and satisfy needs as quickly, efficiently and cheerfully as possible. Anything less is an invitation for criticism, dissatisfaction, potential customer loss and employee frustration. Return policies are a case in point (Lucas, 2005). Even though a customer may not always be right they deserve to be treated with respect as if they are correct in order for us to effectively provide services and generate future relationships. Management must aim to make a commitment to customers and establish an environment that will support this commitment, as this is a sure way to distinguish one’s self as a customer service professional. Conscientious employees will help to build a solid relationship (Lovelock & Wirtz, 2004).

2.6.4 Products / Services
Type and quality of products / services also contributes to a firm’s culture. If your products are reputable and your service is executed professionally at competitive prices your firm will reap the rewards of loyalty and positive word-of-mouth. The opposite, by the same token, is also true (Zeithaml & Bitner, 2003). Pick ‘n Pay strives to provide the freshest products at competitive prices, ensuring the highest level of customer service. With time their customers have come to expect this high level of service and anything less will not be accepted (Pick n Pay, 2009).

2.6.5 Motivators and Rewards
In an employee environment people work more effectively and productively when their performance is rewarded and recognised (George & Jones, 2006; Lucas, 2005). Rewards can either be monetary, material items or a simple verbal praise by managers, and this simple action goes a long way in motivating employees. If employees feel appreciated in an organisation then they will almost always go the extra mile to give off their best for the organisation. Many firms in South Africa acknowledge the efforts of their employees. Pick n Pay always has a picture of their employee of the month posted at the entrance of their stores. SA Home loans treat their credit division to an end-of-month lunch or dinner as a
reward for meeting or exceeding targets. These are small but effective sentiments that go a long way towards motivating staff to excel in their jobs.

2.6.6 Management Support
An agent cannot be expected to handle every customer-related situation that develops, and sometimes the expertise of more experienced employees is needed to lend their authority. Hence, managers and supervisors must constantly provide effective, ongoing coaching, counselling and training to peers to overcome such a situation. This upward communication will aid in their professional development (Zeithaml & Bitner, 2003). An agent should be in a position to ask questions such as what are their exact duties, what is management’s expectation of them, how must specific situations be handled and what is their level of authority? Lucas (2005) believes that a good agent will always look for ways to improve their own skills by seeking out a good mentor in the firm who is well acquainted with the policies and procedures and who has the ability to assist the agent. One of the important warnings to take heed of though is that the agent should avoid complacency. They should always strive to improve themselves and make recommendations, if possible, to management for improvements.

2.6.7 Employee empowerment
This is an effective way of ensuring that service providers can respond quickly to customer needs or requests. The intent of empowerment is to authorise frontline service providers to take action without having to call a supervisor asking for permission. This action increases responsiveness to the customers and boosts the employees overall morale (Lucas, 2005). With employees being given a greater amount of authority to carry out their duties more customers can be served and long queues can be avoided as the employee does not have to get authorisation from a supervisor each time.

2.6.8 Training
Training might address interpersonal skills, technical skills, job skills or organisational awareness. It should help you understand what is expected of you and how to fulfil these
expectations. Staff ought to take advantage of training programs in order to gain knowledge and skills that will be needed to forge ahead in the firm.

According to Donaldson & O’Toole (2002), in order to meet customers’ needs we need to think about quality. Customers who have expectations to receive average services have a greater degree of satisfaction than those with high expectations receiving average services. Quality is thus perceived as a function of the gap between consumers’ expectations and their perceptions of what is actually delivered. The importance of training is critical to effective service delivery. The new Credit Act for example has implications for customers who wish to take out a home loan or finance to purchase a car and agents will need training to familiarise themselves with the new legislation to be able to offer better advice to their customers. There are comprehensive guidelines that have been made available to assist workers who are affected by this new Act to acquaint themselves with the Act and information for the knowledge of customers as well.

Having discussed the elements of service culture and the importance that each element has on establishing and maintaining an excellent service culture and rapport with customers, the discussion now focuses on the SERVQUAL model of Parasuraman, Zeithaml and Berry. These three authors conducted focus groups and formal surveys of customers in different service industries in order to develop lists of attributes which define service quality in general (Rust et al., 1996).

2.7 The SERVQUAL Model

According to its developers the SERVQUAL is a diagnostic tool that helps assist an organisation to identify its broad weaknesses and strengths in the area of service quality (Hoffman & Bateson, 2006). A critical assessment of this model thus becomes imperative to the study.

2.7.1 What is the SERVQUAL Model?

This model was developed by Parasuraman, Zeithaml & Berry and was, according to Rust et al. (2006), a good source of measuring service attributes. Parasuraman et al., (1988)
conducted extensive research in several different service industries in order to develop a list of attributes to define service quality in general (Rust et al., 2006). The SERVQUAL model can be used to perform a gap analysis of the firm’s service quality performance against customer service quality needs. The method entails understanding the perceived service requirements of the consumer. Thereafter the perceptions are assessed and then compared to outstanding firms in industry to analyse gaps and improve service quality.

2.7.2 How does the SERVQUAL work?
Lovelock (2001) and Rust et al. (2006) made reference to the 5 dimensions highlighted by these authors, which were:

- Tangibility (physical attributes of the facility, kit and communications resources)
- Reliability (dependable, accurate performance)
- Responsiveness (promptness & helpfulness)
- Assurance (knowledge, courtesy, confidence, security & credibility)
- Empathy (caring, individualized attention provided to the customer)

These five dimensions have been adapted by some researchers to cover the following 10 dimensions which were:

- Tangibles
- Reliability
- Responsiveness
- Aptitude (ownership of knowledge to carry out a deal)
- Politeness (courtesy, value, thought and outgoingness of service employee)
- Dependability (fidelity, believability, sincerity of the employee)
- Belief in safety (liberty from risk, hazard or misgiving)
- Contact (friendly and ease of call)
- Communiqué (listen to clientele and acknowledge their remarks, give customers feedback in language they are familiar with)
- Thoughtful of the client (becoming familiar with clients needs)

However, many researchers today still make use of the 5 dimensions as highlighted by Lovelock (2001) and Rust et al. (2006) as opposed to the 10 dimensions as many feel that
these 5 dimensions adequately cover the service characteristics across the service sector (12 Manage – The Executive Fast Track, 2009).

Service quality for each dimension is captured by a difference score, 
\[ G = P - E, \]
where \( G \) is the perceived quality, \( P \) is the perception of the service delivered and \( E \) is the expectation of the service.

Customers’ expectations were measured by comparing scales of customers’ expectations and actual experiences on 22 items (Rust et al., 2006). Respondents had to complete scales that measured their expectations of firms within a particular industry based on a set of service characteristics. They then had to record their perceptions of a specific company whose services they had used based on these same characteristics (Lovelock, 2001). When perceived performance is lower than expectations this indicates poor quality and when perceived performance is higher than expectations then this is an indication of good quality.

The gaps of the SERVQUAL model are identified as follows by Lovelock (2001) & Lovelock & Wirtz (2004):

1. The knowledge gap – the distinction between the service provider’s belief of what consumers anticipate and consumers’ actual needs along with expectations.
2. The standards gap – the distinction flanked by management’s perception of patrons expectations and the quality standards established for service delivery.
3. The delivery gap – the difference between specified delivery standards and the service provider’s actual performance on these standards.
4. The internal communications gap – the difference between what the company’s advertising and sales personnel think are the product features, performance and service quality level and what the company is actually able to deliver.
5. The perceptions gap – the difference between what is actually delivered and what customers perceive they have received.
6. The interpretation gap – the difference between what a service provider’s communications efforts actually promise and what a customer thinks was promised by those communications.
7. The service gap - the difference between what customers expect to receive and their perceptions of the service that is actually delivered.

These seven gaps can be seen more clearly in Figure 2.4 which illustrates where each of these gaps occurs in the SERVQUAL model.

**Figure 2.4**

*Seven Service Quality Gaps*

From Figure 2.4 it is clear that gaps 1, 6 and 7 represent external gaps between the client and
the organisation. Gaps 2 through to 5 are internal gaps between different functions and
departments within the organisation. Any of the 7 gaps has the potential to damage customer
relationships (Lovelock & Wirtz, 2004). However, Gap 7 is very critical as it represents the
difference between the customers’ overall assessment of what was expected as compared to
their perceptions of what was delivered. In order to improve service quality, Gap 7 has to be
narrowed, but in addition the other 6 gaps also have to be reduced or closed.

2.7.3 Weaknesses of SERVQUAL
Although the gap methodology offers general solutions that can be applied across different
industries, it does not attempt to identify specific quality failures that can occur within a
specific service business. The onus is on each firm to develop its own customized approach
to ensure that service quality becomes and remains a critical objective (Hoffman & Bateson,
2006).

The one service dimension that stood out for customers across the service industry is
reliability. A limitation of the SERVQUAL model is that the list of quality dimensions is
intended for all service providers and is relatively common, it does not take into account
special properties of any particular service industry (Rust et al., 2006).

In another study undertaken by Lam & Woo as cited in Lovelock (2001), the SERVQUAL
model was not stable due to insignificant correlations between test scores and retest scores.
The findings do not undermine the value of Zeithaml, Berry & Parasuraman’s achievements
in attempting to identify key constructs in service quality but they do highlight how difficult
a task it is to measure customer perceptions of quality.

Zeithaml et al. identified a series of gaps as outlined in the SERVQUAL model; however,
Gap 5 was perceived to be the most serious gap because it arose as a result of the difference
between what the customer expected and what they perceived was delivered. Lovelock
(2001) also highlighted a few shortfalls in the service delivery process. These shortfalls are:
- inaccurate knowledge of what customers expect;
service quality standards are not reflective of what management believes to be customers’ expectations;
- failure to match service performance with specifications; and
- not meeting the service performance levels that are promised / implied through our marketing communications.

Numerous studies distrust the soundness of the five dimensions and the standardized applicability of this method for all service sectors. According to Thomas P. van Dyke, Victor R. Prybutok and Leon A. Kappelman (1999), the use of difference scores in calculating SERVQUAL contributes to problems with reliability and validity of the measurements. They suggest that caution should be exercised in the use of the SERVQUAL scores and that more work is needed in the development of measures for assessing the quality of information services (Zeithaml & Bitner, 2003).

2.7.4 **Strengths of SERVQUAL**

Most users of the SERVQUAL have the same opinion that a careful assessment of service desires and excellence contributes to recovering service excellence. The SERVQUAL model provides comprehensive information about:
- buyer perception of service
- presentation level as perceived by clients
- client commentary and suggestion
- impression from workers regarding buyer outlook and contentment.

2.8 **The Customer Gap**

According to Zeithaml & Bitner (2003), the customer gap can be seen as the difference between customer expectations and perceptions. Customer expectations are characterised by the standards or reference points that customers bring into the service experience, whereas buyer perceptions are the biased assessment of concrete service experience.
2.8.1 The Provider Gaps

The gaps model suggests that four other gaps – the provider gaps – need to be closed in order to successfully close all the important customer gaps. These gaps occur within the firm providing the service; hence, the term ‘provider gaps’.

Gap 1: Not knowing what customers expect
Gap 2: Not selecting the right service designs and standards
Gap 3: Not delivering to service designs and standards
Gap 4: Not matching performance to promises.

2.8.1.1 Provider Gap 1: Not knowing what customers expect

Provider Gap 1 is the dissimilarity involving customers’ prospect of service and the firm’s thoughtfulness of these expectations. This gap occurs primarily due to the lack of accurate understanding by the firm of exactly what these expectations are. Zeithaml & Bitner (2003) are of the opinion that managers are not aware of these expectations due to infrequent, direct interaction with customers, or the unwillingness to ask customers about their expectations of the firm. This lack of understanding can set off a sequence of awful decisions and lead to suboptimal reserve allocation so as to produce reduced service quality. This research will aim to test whether these findings, as proposed by Zeithaml & Bitner (2003), hold true in our local call centre operations.

In the changing environment today, the power on the road to create adjustments in service deliverance is delegated to assigned teams and forefront people. According to Zeithaml & Bitner (2003), one of the critical elements accountable for causing provider Gap 1 includes an insufficient marketing research orientation. The lack of accurate information about customer expectations enlarges Gap 1.

Every effort has to be made to capture information about customer expectations through marketing research. One could use formal or informal methods to gain this information; however, the traditional research approaches are still favoured. These include customer interviews, survey research, complaint systems and customer panels to name a few.
A lack of customer retention strategies can also contribute to provider Gap 1 and a way to alleviate this would be to forge strong relationships between the firm and its customers. The final cause linked to provider Gap 1 is the need for service recovery (Zeithaml & Bitner, 2003). It is critical to comprehend the significance of service recovery – why individuals whine, what they anticipate when they whine and how to develop efficient service recovery strategies for coping with service failures. These strategies may involve a sharp complaint-handling course of action and an emphasis on training workers to respond immediately, in order to address the problem.

2.8.1.2 Provider Gap 2: Not having the right Service Quality Designs and Standards
Although accurate perceptions of customers’ expectations are necessary to deliver superior quality service, it is not sufficient enough. The presence of service designs and performance standards reflect these perceptions more accurately (Zeithaml & Bitner, 2003). Service companies experience difficulties in translating customer expectations into service quality specifications that employees can understand and execute. These problems are reflected in Gap 2, the difference between the firm understanding customer expectations and the development of customer driven service designs and standards. Customer driven standards are based on pivotal customer requirements that are visible to and measured by customers (Hoffman & Bateson, 2006).

Provider Gap 2 also arises as a result of management sometimes feeling that customer expectations are unrealistic and unreasonable. There is also the perception that the extent of unpredictability in services defies equivalence and so, the establishment of principles will not assist in achieving the required goals (Zeithaml & Bitner, 2003). Some of these assumptions are valid in some situations but often they are only excuses presented by top management to tackle the difficult challenges of creating service standards to deliver excellent service.

A service is often intangible and therefore, becomes difficult to describe or communicate. It is thus, very important that all the key role players, namely, managers, frontline employees
and support staff, employ similar concepts of the new service based on the clients’ desires and prospects.

2.8.1.3 Provider Gap 3: Not delivering to Service Design and Standards

Once the service design and standards are in place, it would be reasonable to assume that the firm is on its way to delivering high-quality services. This might be true but is still not enough to ensure excellent service delivery. All the systems, processes and people must be in place to ensure that the service delivery matches the design and standards in place.

Provider gap 3 is the inconsistency between buyer focused service standards and concrete service presentation workers. Even though guiding principles to execute services well are established presentation is not certain. These principles must be supported by all to be successful. Workers should be paid based on acting along these principles.

Research according to Zeithaml & Bitner (2003) has identified many inhibitors of closing Gap 3. These factors include:-

- Workers not understanding their roles in the firm.
- Workers who experience disagreement among clients and business administration.
- Poor employee selection.
- Insufficient knowledge.
- Unsuitable reward and gratitude.
- Need for empowerment and collaboration.

These factors, according to Zeithaml & Bitner (2003) relate to the firm’s human resources function and involve internal practices such as recruitment, training, feedback, job design, motivation and organisational structure, all of which must be addressed across the functional departments to be able to deliver better service performance.

The customer is also critical to provider Gap 3; if they do not carry out their role properly like, for instance, failing to disclose information to the supplier or neglecting to interpret and pursue instructions then service value is jeopardised. Customers can also negatively pressure
the worth of service provisions received by similar customers if they are disruptive or take more than their share of a service provider’s time.

The challenges in service delivery also influence Gap 3 through intermediaries such as retailers, franchisees, agents and brokers. According to Zeithaml & Bitner (2003), as a result of quality being assessed in terms of liaisons between buyers and staff the service encounter is imperative.

2.8.1.4 Provider Gap 4: Not Matching Performance to Promises
This gap illustrates the difference between service delivery and the service providers’ external communications. Promises made by a service company through its media advertising, sales force and other marketing communications may potentially raise the customers’ expectations - the standards against which the customer will assess service quality. Broken promises can arise as a result of making too many promises in adverts and individual exchange, insufficient synchronization among operation and advertising and distinction in policy and dealings. Service providers also can fail to capitalise on opportunities by educating consumers to use services appropriately. They also fail to manage customers’ expectations of what will be delivered in service transactions and relationships.

Another difficulty with Gap 4 is that interactions to clients involve crossing organisational limitations. Marketing may promise what can be done, and due to individuals not being managed like machines communication becomes difficult. This type of marketing is what is termed interactive marketing. Zeithaml & Bitner (2003) refer to this as promotion between salespersons and clients and ought to be synchronized with conservative marketing approaches.

When workers do not understand the service offering they tend to over promise to buyers and can neglect to impart valuable information to buyers, which further leads to poor service quality perceptions.
In addition Gap 4 is associated with the price of offerings. Buyers often have a reference point when comparing the price of products but fall short when comparing the price of a service.

2.9 Criticism of the Gaps Model
Buttle (1994) has subjected the SERVQUAL to a number of theoretical and operational criticisms which are listed below:

2.9.1 Theoretical
- Paradigmatic objections: SERVQUAL is based on a disconfirmation hypothesis to a certain extent and not an attitudinal paradigm, and fails to describe an economic, statistical and psychological theory. This disconfirmation model is adopted in buyer fulfilment creative writing, where buyer pleasure is operationalised by assessing the association linking expectations (E) and outcomes (O). If O matches E customer pleasure is predicted, if O exceeds E customer delight is expressed and if E exceeds O displeasure is indicated. Cronin and Taylor (1992, 1994) were also in agreement with Buttle (1994), that the SERVQUAL was flawed due to the adoption of the disconfirmation model. They believe that perceived quality is best conceptualized as an attitude. Andersson (1992) further highlights SERVQUAL’s malfunction to illustrate findings from previous social science research, especially economic theory, statistics and psychological theory. Andersson (1992) claims that Parasuraman et al., (1988) “abandon the principle of scientific continuity and deduction.” He found that Parasuraman et al’s (1988) management technology ignored the costs of getting better service excellence. Secondly, Parasuraman et al., (1988) collect service quality data using ordinal scale methods (Likert scale) yet perform analyses with methods suited to interval level data (factor analysis). Thirdly, Parasuraman et al., (1988) have not considered the use of statistical methods. Ordinal scales do not allow for product-moment calculations. Interdependencies among the dimensions of quality are hard to explain. And finally, Parasuraman et al., (1988) fail to draw on the huge creative writing on the psychology of perceptions.
• Gaps Model: There is minute proof that clients measure service quality in terms of P – E gaps. Babakus and Boller (1992) found that the difference scores in the gaps model does not offer extra information outside of that limited to the perceptions component of the SERVQUAL model. The main contributor to the gap score was the perception expectations were always rated high. Churchill and Suprenant (1982) also questioned if the gaps measurement contributed anything of value because the gap is a function of E and P. The SERVQUAL, according to Buttle (1994), does not consider the impact of shifting expectations. Customers study from experience and Parasuraman et al., (1988) infer that expectations rise over time. This is not always the case and expectations may fall over time. Gronroos (1993) recognises this as a weakness in understanding service quality and suggests further research is essential on how expectations are formulated and altered over a period of time.

• Process orientation: The SERVQUAL focuses on the process of service delivery, not the outcomes of the service encounter. Gronroos (1993) identified 3 components of service quality, namely, technical which looks at what, functional quality looks at how and looks at issues like performance of employees and speediness of service and finally, reputational quality which looks at the company’s image.

• Dimensionality: SERVQUAL’s 5 dimensions are not universal; the number of dimensions comprising service quality is contextualised. Also, items do not always load onto the factors and there is an elevated amount of intercorrelation between the 5 RATER proportions.

2.9.2 Operational

• Expectations: Consumers use standards other than expectations to evaluate service quality and SERVQUAL fails to measure absolute service quality expectations. Parasuraman et al., (1988) defined expectations as needs or requirements of a consumer however researchers such as Teas (1993) found these explanations to be vague. In his studies Teas (1993) felt that the consumer could use other interpretations to judge service quality such as service attribute importance, forecast performance, ideal performance or minimum tolerable performance.
• Item composition: 4 or 5 items cannot capture the variability within each service quality dimension.
• MOT (moment of truths): Customers’ assessment of service quality may vary from one MOT to the next.
• Polarity: The reversed polarity of items in the scale causes respondents error.
• Scale points: The Likert scale is flawed as is not an accurate indicator of performance.

2.10 Putting it all Together
According to Zeithaml & Bitner (2003), the main idea behind concluding the buyer space is to seal provider gaps 1 through to 4 and maintain its closure. The gaps model is a structure for firms wishing to advance valuable service quality. Figure 2.5 highlights the different gaps as identified by Zeithaml & Bitner (2003).
From the discussion highlighted above we can conclude that the SERVQUAL is a chief force in the industry and scholastic communities. A number of theoretical and operational issues have been highlighted as causes for concern. However, despite the shortcomings, SERVQUAL is still moving rapidly towards institutionalised status. The criticisms highlight the call for essential investigations as it is doubtful if consumers use expectation and perception to judge service quality, the universal application of the 5 RATER dimension and the appropriateness of the disconfirmation paradigm. These should be explored further by future researchers.
An indepth analysis of service quality has just been completed and the focus now shifts to customer relationship management (CRM) and the importance that CRM plays in trying to foster a better understanding and relationship between an organisation and its customers.

2.11 Customer Relationship Management

The term customer relationship management (CRM) evolved when there was a change in emphasis from competitive business strategies to consumer transactions and the satisfaction of customer needs and wants.

Knox, Maklan, Payne, Peppard & Ryals (2003) make reference to a CRM report published by the Financial Times (Ryals et al, 2000) suggesting that CRM consists of three main elements:

- the identification, satisfaction, retention and maximising of value of the firms best customers;
- ensuring that each contact that the firm has with the customer is appropriate and based on extensive knowledge of the customer’s needs and profitability;
- creating a complete picture of the customer.

Creating satisfied customers at a profit is now the focal point of attention for firms such as Pick n Pay who have been striving to achieve this over the past 40 years. Peter Drucker (1954) first wrote about it almost fifty years ago. Drucker (1954) stated that the customer determines what the business is and therefore, the main purpose of the firm should be to create and keep customers.

In a recent report conducted by the Financial Times as cited in Knox et al. (2003), the following components for successful implementation of CRM have been identified:

- a front office that integrates sales, marketing and service functions across media (call centre, people, stores and internet);
- a data warehouse to store customer information and appropriate tools with which to analyse the data and learn about customer behaviour;
- performance measures that enable customer relationships to continually improve.
To build on the above components for the successful implementation of CRM, Sturdy et al., (2001) have found that in recent years there has been a dramatic rise in the call centre as a key mode of employment in many advanced economies. Call centres are seen as a mechanism to implement CRM strategies within an organisation. They have estimated an annual growth of 100 000 jobs per year in call centre jobs in Europe. Customer call centres are attractive to firms for two main reasons. The first is that they reduce costs per customer transaction, for example, compared to face-to-face transactions carried out for at a bank, for instance. Secondly, call centres enable firms to deliver higher and more consistent levels of customer service, through allowing customers to make transactions outside of normal business hours (Sturdy et al., 2001).

Payne et al., (1995) suggest that managers must meet four requirements in order to effectively manage relationships. These four requirements are:

- **awareness** of a problem and opportunity, for example, if call centre sales agents are not meeting their daily sales targets how do they rectify the situation?
- **assessment** in terms of the firms’ position to deliver the desired results - all firms should have an overall set of organisational goals that each department should be aspiring to attain and the success of attainment of goals will depend largely on the resources of the firm;
- **accountability** by way of reporting on relationships so that they can be weighed against other measures of performance - it has been noted by various authors such as Payne et al. (1995) that when there is a strong need for accountability of actions then individuals responsible tend to be more diligent in carrying out their tasks;
- **actions** of managers to make decisions and reinforce awareness must be carried out with authority and conviction in the belief that the actions are the best for the firm. For example, investing time, effort and money on a comprehensive training programme to better train call centre sales agents in order to harness and develop their sales skills.
Donaldson & O’Toole (2002) believe that managers realised that one-to-one communications and new forms of promotion are proving to be critical in building customer relationships. If a firm fails to embrace CRM then they risk losing valuable customers to those that can offer greater and more valuable packages to their customers.

According to Farhoomand (2005), the global reach of the internet and the vast technological advancements have lowered the barriers to competition and therefore, companies are finding it difficult to create differentiation solely on the products or services that they offer. Thus, the need to increase customer expectations has been highlighted. Since the cost of bringing in new customers is many times more than retaining existing ones, it will be logical for firms to gain a competitive edge by acquiring valuable information about the customer wherever possible so that a positive relationship can be forged. With the aim of improving the levels of service delivery offered to its customers and enhancing the overall experience of customers with the organisation, many large business organisations are investing large amounts of capital in setting up call centres.

2.12 The Call Centre
A call centre can be defined as a large centralised office whose main purpose is to send and receive a large volume of requests via telephone. A call centre is operated by a firm to either administer incoming product support or enquiries from customers to telemarketing, to collectively managing letters, faxes and emails. There are two types of calls pertaining to the call centre, namely, outbound and inbound calls. Inbound calls are made by consumers to obtain information about a product or service, report a malfunction or register a complaint, or simply to ask for help. Outbound calls arise when agents call potential customers mainly to conduct telemarketing. For the purposes of this study, the researcher will be focusing on inbound calls (Wikipedia, 2009).

A call centre is usually organised into a multi-tier support system. The first tier consists of operators who direct enquiries to the relevant departments. If however, the caller requires further assistance they are then referred to the second tier where most calls can be resolved.
Should a customer require further assistance they can be referred to the third or more tier of support staff who are typically experts who render assistance.

Call centres have come under criticism for the de-humanising atmosphere. Agents complain about low rates of pay and the restrictive manner in which employers run the centre, for example, strict restrictions about the amount of time an agent can spend in a toilet. Furthermore, callers often complain that agents are not skilled enough or do not have enough authority to resolve problems.

There has been a tendency in the UK to build call centres in areas that are depressed economically so that businesses cash in on cheap land and labour and benefit from grants to encourage employment in these impoverished areas. Call centres were also established in India, where a large part of the population has a grasp of the English language; however, customers were dissatisfied, because they were unable to understand the Indian call centre agents and vice versa (Wikipedia, 2009).

Leading UK telecommunications firm Talk Talk is to spend R200 million to set up two call centres, one in Gauteng and the other in Cape Town. Research published in November 2006, by Datamonitor predicted that South African call centres would double by 2008 and rated Cape Town ahead of India for quality of service. Datamonitor also predicted that there would be 939 call centres in South Africa by 2008, almost double the number of 494 in 2003 (South Africa. Info, 2008).

Natural English accents and similar cultural outlook gives South Africa a competitive advantage for activities such as call centres. Ex President Thabo Mbeki in his 2006, State of the Nation address to Parliament, identified the call centre industry as a good sector to boost South Africa’s economic growth rate and create employment. The government’s strategy was to make South Africa the world’s third biggest business process outsourcing centre after India and the Philippines by 2008. Research published by Deloitte, in December 2005, found that there were 535 call centres in South Africa at the time employing about 65000 people and this has steadily increased over the recent past (Biz Assist Technologies (PTY)
Unfortunately no recent data is available to give any indication of what the current position is presently in South Africa, statistics dating back to 2008 projections are only still available.

2.13 Conclusion
Chapter two has detailed the important aspects of a service. It then examined the components of a service culture which is not always commonly present in a service based organisation and it has highlighted that marketing a service is different from that of a tangible product; hence, the marketing mix strategy has to be adjusted to cater for the service component of marketing. A review was also undertaken of the SERVQUAL model to assess its relevance in business today, and it can be concluded that there are many variations to this model as well as many criticisms that the model may struggle to cope with the many diversities faced in service environments today. However, the service quality gaps prove to be very useful even when used in business situations today as many of these gaps still occur in business practice. The growing prominence of the call centre within South Africa has also been highlighted with Government having huge strategies in place to grow and harness this sector in the future. Chapter three will attempt to provide a better understanding of the consumer satisfaction levels and to reflect what their needs are in terms of service delivery and how a consumer chooses to purchase a particular service. The chapter also explores strategies for influencing customer perceptions and service recovery strategies.
CHAPTER THREE

Understanding the Requirements for Service Excellence

3.1 Introduction
Shaw & Ivens (2002) have likened the customer service experience to the next business tsunami. They agree that we are now being exposed to the effects of a fast approaching wave of change, a new business differentiator that is not an ordinary wave but rather a tsunami – which is a massive tidal wave triggered by seismic activity that causes shifts in the earth’s crust.

Many researchers believe that prices, features, quality and service are losing their ability to create differentiation amongst companies (Lovelock, 2001; Rust, Zahorik & Keiningham, 1996; Shaw & Ivens, 2002; Zeithaml, Bitner & Gremler, 2006). Customers are likely to switch to those companies that offer greater customer experiences. Ian McAllister, former Chairman and Managing Director of Ford Motor Company Ltd, was of the opinion that in the 1980’s quality was a differentiator but he believes that the 2000’s will be influenced by customer experience as a differentiator (Shaw & Ivens, 2002). This chapter aims to explore the different influences on a customer’s ability to choose a proper service provider ranging from the skills possessed by front line staff, to the expectations that customers may have about a service offering. The impact of technology which is always advancing will also be analysed to ascertain how it could impact on a customer’s service experience within the organisation.

3.2 Search, Experience and Credence Properties
One of the ways of isolating differences in evaluation processes between goods and services is a classification of properties of offerings (Zeithaml et al., 2006). The quality of tangible goods is easier to evaluate than that of services which are intangible. The attributes that customers use to evaluate tangible goods are known as search qualities, which are attributes that a consumer can determine before purchasing a product. More intangible services possess a higher degree of experience qualities, which can be mobilised after a purchase or during consumption. This however increases the buyer’s risk and requires that marketers
provide reassurance to consumers. The credence qualities comprise of characteristics that the consumer may find impossible to evaluate even after purchase and consumption. For example, if one has brake linings done to one’s vehicle, one must possess mechanical skills to evaluate if the service was performed properly (Lovelock, 2001; Rust et al., 1996; Zeithaml et al., 2006).

The following section of the chapter undertakes an assessment of the importance of front line staff in making sure that the service encounter between the organisation and the customer is a success. Strategies, guidelines, skills and the necessary training required by these personnel will be looked at in detail in order to facilitate better all-round communication and ensure that a greater level of service is meted out to the customer.

3.3 Strategies for Influencing Customer Perceptions

Outlined below are a few very critical components of service delivery that are needed to ensure that the organisation is in a better position to cater for the needs of the customer. It is important to measure and manage customer satisfaction and service quality in customer focused firms continually (Zeithaml & Bitner, 2003). Many firms have likened their customer satisfaction measurements to employer training, reward systems and leadership goals as all of these have direct spin-off effects for overall performance efficiency.

Furthermore, firms should aim for customer quality and satisfaction in every service encounter. Zeithaml et al. (2006) stress that in order to achieve this objective firms must have clear documentation of all points of contact between themselves and the customer. Once this is done they then need to develop an understanding of customer expectations for each of these encounters so that strategies can be built around meeting these expectations. Five themes have been identified to cope with satisfaction or dissatisfaction in service encounters:

- Plan for effective recovery: If a customer has experienced dissatisfaction on the first try then the firm has to aspire to do things correctly the second time to avoid the same situation from occurring. The service process has to be redesigned to identify the cause
of the service failure. A recovery strategy must be put into place to create satisfaction for the customer (Zeithaml et al., 2006).

• Facilitate adaptability and flexibility: Agents need to know when and how a system can be flexed and why particular requests cannot be granted. Thorough knowledge of the service concept, service delivery systems and standards must be communicated to employees, to enable them to be flexible when dealing with customers without overstepping their levels of authority.

• Encourage spontaneity: Firms must encourage spontaneity and discourage negative behaviour amongst employees. Recruiting employees with strong service orientations is one way of doing this. Strong service culture, employee empowerment, effective supervision and monitoring and quick feedback to employees will also encourage spontaneity.

• Help employees cope with problem customers: Management and employees need to accept that the customer is not always right and will not always behave in an acceptable manner. Employees need appropriate coping and problem solving skills to handle difficult customers as well as their own feelings in difficult situations (Zeithaml et al., 2006).

• Manage the dimensions of quality and the encounter level: Although the five dimensions of service quality are generally applied to overall quality of the firm, it is possible to relate them to each individual encounter. Strategies can be put into place to try and improve service delivery based on each of the five dimensions as outlined by the SERVQUAL model (Zeithaml & Bitner, 2003).

Onyeaso (2007) conducted empirical testing to ascertain if there was a long run equilibrium relationship between customer dissatisfaction and complaints behaviour. Research shows that there has been an increasing interest in consumer dissatisfaction and complaint behaviour, with the main reason for this being attributed to the need for managers to maximise their customer retention by minimising customer dissatisfaction through better quality offerings (Lovelock, 2001; Rust et al., 1996; Zeithaml et al., 2006). Onyeaso (2007) thus concluded that indeed there is an equilibrium relationship between customer dissatisfaction and complaints behaviour. Organisations, however, have to invest in a strong
service recovery process in order to turn this dissatisfaction around. The service recovery process is now gaining momentum and is being used as a superior strategic asset to compete with competitors.

### 3.4 Listening to the Customer

It cannot be stressed enough that finding out what the customer expects is critical to providing quality services (Zeithaml et al., 2006). The quality of listening has a paramount impact on the quality of services (Lovelock, 2001). According to Peters & Waterman (1982), there are many examples of senior executives of companies like Hewlett-Packard, McDonalds and Disney spending significant time in the field, taking sales roles or those of cleaning and selling tickets to be more in touch with their customers and to actually listen closely to what their expectations of services are.

Oakland & Beardmore (1995) have found that the most common technique for listening to customers is satisfaction surveys. Goodman, Broetzmann & Adamson (1992) identified three problems encountered when using such surveys:

- The interpretation of the meaning of dissatisfaction measures proves to be a difficult task.
- The lack of analysis of market actions which result from satisfaction levels.
- The inability to identify sources of satisfaction or dissatisfaction.

Oakland & Beardmore (1995) suggest that satisfaction cannot be measured in a vacuum; measurements of expectations have to be included in order to contextualise the result. For example, a firm’s overall customer satisfaction rating of 8 out of 10 tells management nothing of what the customers’ expectations were. If their expectations were high, than a score of 8 would indicate dissatisfaction.

Surveys do not attempt to measure the market actions of customers’ dissatisfaction and this can mislead management. For example, the majority of customers may be satisfied with a product or service but failure to ask about market intentions like ‘would you buy this product again?’ or ‘would you recommend the product to a friend?’ might convey a less
accurate picture of satisfaction to management. Goodman et al. (1992) conducted research of a US retailer and found that forty six percent of the respondents found faults that potentially hampered the service experience at the store but nobody complained to anyone as they perceived that nothing would be done if they complained; hence, the inability to identify sources of satisfaction or dissatisfaction.

3.5 The Ten Commandments of Customer Service

According to BizAssist Technologies (PTY) Ltd (2009), the following ten principles or commandments should be strictly adhered to in order to avoid a situation of customer service failure or customer dissatisfaction from occurring. These Ten Commandments are as follows:

1. **Know who is boss:** You are in the business to service customer needs and this can be done only through listening to them.

2. **Be a good listener:** Stirtz (2010) reiterates the success of Magic Johnson when he opened up a theatre in partnership with T.G.I. Friday’s. This theatre was situated in the city and Magic found that these customers did not go to the movies and then to dinner, as compared to those who lived in the suburban areas normally would, but preferred to have dinner at the movies. So he introduced the sale of hot dogs at the theatre which proved to be a huge success.

3. **Identify and anticipate needs:** The more you know your customers, the better you are able to anticipate their needs. Bannatyne (2010) has found that customers are opting to interact with firms via social networking sites such as Twitter and Facebook.

4. **Make customers feel important and appreciated:** Treat each customer as an individual. Always use their names and find ways to compliment them. Vodafone and Virgin Media are using social networking as a key part of their customer services.

5. **Help customers understand your system:** If customers do not understand the firm’s system for getting things done they become confused, impatient and angry. Take the time to explain the system to them.

6. **Appreciate the power of “yes”:** Always look for ways to help the customer. Assure them that you can accede to their requests. Always fulfill your promises to them.
7. Know how to apologize: Apologize when something goes wrong. The customer may not always be right but the customer must win. Make customer complaints simple and always value complaints.

8. Give more than expected: Think of ways to elevate the firm and stay ahead of the competition. For example, what can you give customers that they cannot get elsewhere? And what can you do to follow-up and thank people even when they do not buy? Miller (2010) stresses that firms spend millions of rands in expensive advertising campaigns but none of these firms actually take time out to thank patrons for their loyalty and support.

9. Get regular feedback: Encourage and welcome suggestions about improving your service. For example, Pick n Pay always invites customers to participate in quick surveys prior to exiting the store to enquire about the customer’s service experience with a view to improving service delivery.

10. Treat employees well: Employees are your internal customers and need to be appreciated. Thank them and let them know how important they are. Treat them with respect.

There seems to be a common strategic goal amongst many businesses today across management disciplines, ranging from information technology, to operations planning and management psychology and they are all concentrating passionately and devotedly to customers and their needs. Amin (2005) likened the relationship between an organisation and its customers as a “marriage”; she suggests treating customers like a spouse, you always love and make sure that you keep the honeymoon period going because if you do not then customers are likely to stray and get involved with a third party, where their needs will be better met. Amin (2005) shares seven deadly skills of customer service with organisations, wishing to really pay closer attention to their customers:

1. Know your customer: This seems simple enough to do, but the problem is that many executives get caught up in the corporate hierarchies, personal remuneration packages and power struggles and forget to create good relationships with the customer instead.

2. Focus on the customers’ agenda, not yours: Even if at first it’s unclear what a customer wants from you, your genuine concern for them and how you treat them may make them
more interested in the service of your firm. Giving them what they want by focusing on their agenda is very important.

3. Do not insult customers by playing the number game. Avoid automated calls as they are perceived to be impersonal. Consumers prefer interaction with an agent.

4. Get real and yes size does matter. You need to constantly seek knowledge on what the customer wants and how you can satisfy these wants. Although it is not financially feasible to make market offerings based on individual needs, firms must think of customers as individuals and market to them in that way. They have to get real about how to interact with customers so as to be aware of what the customer wants.

5. Understand the difference between a quick sale and a customer relationship. Amin (2005) suggests that a firm must be sincere about looking after its customers. Customers are very perceptive and will sense if the firm is only interested in a quick sale. The chances are that if they do buy from you they may not do so again in the future.

6. Be prepared to rethink your business completely if what you are doing right now is not working. Always be aware of customer lifestyle changes and know how this impacts on their needs as individuals. Things that worked twenty years ago may not work as well now, so the firm must be flexible and change in keeping with customer needs.

7. Only deploy a Customer Relationship Management system when you really know what you want it to do. If you deploy a CRM system, deploy it for the right reasons and to do the right things. The CRM system should embody all your good intentions and good philosophy about customers, and not merely serve as a tool that forces you to do things that do not really suit you. Adhikari (2009) and Wertheimer (2009) believe that in any business the 80:20 principle applies whereby twenty percent of loyal customers account for eighty percent of business so it makes sense to build customer loyalty. Wertheimer (2009) reaffirms Amin’s (2005) likening of CRM as a marriage, where the two-way dialogue must be maintained at all times between both parties. Adhikari (2009) also proposes that in order to facilitate communication today in keeping with the findings of Bannatyne (2010), Facebook, Twitter and social blogging can be implemented as new tools within the firms CRM strategies to foster better relations with the customer.
The concept of the call centre has developed at an accelerated pace especially within the UK over the last decade. In a study undertaken by Higgs (2004), the economic benefits of the call centre were assessed in terms of the threats that it encompasses in terms of the nature of the work and the operating environment leading to high levels of attrition with recruitment processes, training and the loss of productivity costs. His study explored the relationship between emotional intelligence (EI) and performance.

A sample of 289 agents from three organisations was studied. A generic call centre agent recruitment criteria summary was used made up of the following:

- Self awareness – being aware of one’s feelings and managing it.
- Emotional resilience – being able to perform under pressure.
- Motivation – having drive and energy to attain goals.
- Interpersonal sensitivity – showing sensitivity and empathy towards others.
- Influence – ability to persuade and influence others to accept your views and proposals.
- Intuitiveness – ability to make decisions using reason and intuition.
- Conscientiousness and integrity – being consistent in one’s words, actions and behaviour in an ethical manner.

The study found that the overall EI is significantly related to centre agent’s performance, as are six of the seven elements. Intuitiveness is negatively related to performance between high and low performance groups. EI elements of influence and self awareness do not differ between high and low performance groups. In analysing the correlations between EI elements and performance the highest levels of significance were conscientiousness, emotional resilience, motivation and interpersonal sensitivity and tend to be seen as important during the recruitment process of agents (Higgs, 2004).

Higgs (2004) also found employee and customer satisfaction are closely related. If a firm wants to satisfy its customers then employee satisfaction becomes critical (Hoffman & Bateson, 2006; Hoffman, Bateson, Wood & Kenyon, 2009). The face behind the service organisation is its contact staff. In many cases contact personnel often perform complex and
difficult jobs; however, they are the lowest paid and least respected individuals in many firms and often in society.

Customer service employees should have specific traits irrespective of whether they are dealing with customers on a face-to-face basis or on a telephonic or written basis. An in-depth analysis will be undertaken to understand and highlight the importance of the human resources aspect of service delivery in selecting and training the correct personnel in order to handle customer liaisons effectively.

### 3.6 Human Resources

There are certain critical facets that need to be present and which must be especially sought out by Human Resources personnel.

#### 3.6.1 The Customer Service Employee

Theron, Bothma & Du Toit (2003) highlight the following characteristics which they feel are critical skills that customer service employees should possess. These characteristics include:

- Coming to work regularly because if the customer service employee is away often and if interactions are handled by someone else, this may cause problems especially if the other person is inefficient.
- Be on time and never keep customers waiting.
- Take pride in work and display confidence. Professionals care about what they do and should strive to teach customers new things (Snow, 2007). Have a positive mental attitude as there is always a negative environment created when customers lodge complaints but staff must maintain a positive mental attitude (Cavitt, 2010).
- Be affable and knowledgeable as this is the quickest way to diffuse a tense situation especially if the other person is being rude or is angry (Brown, 2007; Cavitt, 2010; Snow, 2007).
- Be interested and listen carefully to the problem and try to resolve it as these are the traits of a customer service superstar according to Cavitt (2010). Take responsibility by being responsive and always ensure a satisfactory end to the matter (Snow, 2007).
Follow up with the customer to enquire if they were satisfied with the outcome. Be assertive as this is an unfortunate situation but sometimes although a solution is presented it may not be the solution that the customer wants. A good employee will have to know when to say “NO” and to stick by a particular outcome. Do not accept verbal abuse and inform a customer if his/her approach or tone is unacceptable, in a calm, firm and rational manner. Brown (2007) believes that it is not always possible to say “YES” to all customer requests but one should avoid saying “NO” and rather opt to say “I will see what I can do” instead.

Hoffman & Bateson (2006) have uncovered seven categories that they classify as unsavoury behaviour from front line staff, these include: apathy, brush-off, coldness, condescension, robotism, rulebook and the run-around approach. LeClaire (2000) & Vikesland (2002) found that in order to cope with negative employees management must offer to assist the employee either thorough training or by enquiring about the cause of the negativity but staff that already possess a negative attitude should be motivated to change their behaviour. It is not always easy to find the right front line personnel. In many instances the wrong people are placed in the ‘firing line’ when they do not want to be there and are really not interested in customers, leaving the customer very disgruntled.

### 3.6.2 Finding the Right Staff

Management has to take a fourfold approach to resolve the problem of finding the right person for the job. Firstly, considerable care must be taken in selecting the right type of person. This may include a strict selection process in which candidates with the appropriate qualities will be carefully considered. Candidates should be assessed on how they would handle a difficult customer. Overland (2005) and Twentyman (2008), view interview techniques as the best method of testing competency, where candidates are asked open ended questions to encourage them to talk about how they have coped with incidents in the past to obtain an inclination of how future situations will be handled.

Secondly, management has to train front line staff. Training should be done on an on-going basis, on various aspects of customer service and dealing with customers, like for instance
how to be more friendly or attentive (Vikesland, 2002). Shelton (2003) undertook an audit of the service delivery levels at SABMiller, and found that Norman Adami the CEO’s mission was to win the customers’ favour and loyalty especially since Miller’s market share was declining. Adami’s turnaround strategy involved firing poorly performing executives and implementing a personnel rating system to ensure that all service staff worked to the best of their abilities, leaving no room for poor performers. SABMiller spent close to R154 million on training interventions to improve the level of service delivery and they enjoy a high staff retention rate as a result of their competitive salaries. As a general rule new staff has to undergo psychometric testing (Shelton, 2003).

Thirdly, management has to monitor the progress of employees. This can be done by obtaining feedback from consumers about the level of service provided by a particular member of staff. Employees can also be observed by management on how they behaved in resolving a consumer query or complaint (Grote, 2005). Management needs to also include staff in the assessment by regularly asking them if they are coping. In the event of weaknesses, these can be resolved through training or other forms of support (Brown, 2007; Cavitt, 2010; Snow, 2007). SABMiller also has in place an Internal Management Process (IMP) which involves individuals meeting with managers on a monthly basis to discuss performance; in addition, annual performance reviews are held (Best Employer SA, 2008).

Finally, employees should feel comfortable enough to let management know if they are unhappy or uncomfortable in a front line position. If training has not proved to be a success then perhaps they can be moved to another position.

Since much of the job of call centre agents involves liaising with customers via the telephone it is critical to understand what skills are needed to facilitate this form of communication as many agents do not undergo any form of formal training regarding proper telephone etiquette. In order to improve the level of service delivery many firms must introduce a service culture within the organisation. To achieve this, management has to select, motivate, reward, retain and unify good employees but in South Africa this is not a management practice (Blem, 1995). Service orientated companies have to perpetuate
commitment and competence and this can be done by attracting, developing and keeping the right people, for example, at SABMiller every effort is made to maintain contact with past employees many of whom return to work at the firm. Incompetent people affect the culture of the firm negatively; therefore, extensive screening and interviewing should be undertaken to find the right fit.

3.6.3 Doing It Right the First Time

According to Blem (1995), in an attempt to increase productivity many firms have focused on two important questions being: How can we do it faster? How can we do it cheaper? But many fail to answer a third basic question of: How can we do it right the first time? The key to higher productivity lies in working better rather than faster. The payoffs for improving quality include:

- Lower costs: Doing things right the first time lowers the cost of materials, inspection and repairs.
- Worker pride: Doing things right the first time creates the positive feelings of confidence and success that come from mastering a job.
- Customer loyalty: Doing things right every time is the best way to ensure repeat business and attracting new customers. Research suggests that customers demand quality in future and not price in the purchase of goods and services, which they will be willing to pay for (Blem, 1995; Brown, 2007; Cavitt, 2010). In this regard, Blem (1995:51) believes that “The bitterness of poor quality lingers long after the sweetness of a cheap price is forgotten”.
- Improving quality: How can quality be improved? The answer is simple: Ask the person who does the job how to improve it as he/she will have more insight into the job than anyone else. Worker participation should be encouraged at all stages.

In keeping with the theme of getting things done right the first time, International Business Machines (IBM) (2007) found that self-service portals can help build customer loyalty and improve satisfaction. If designed and deployed effectively, self-service portals can save a firm between fifteen to thirty percent by redirecting contacts, reducing call volumes and automating assistance. However, firms fear alienating customers and are unsure of how to
create a positive experience; therefore, they are tentative about launching self-service portals. Overall, IBM (2007) found that if implemented correctly, self-service portals should provide users with quick and efficient information; portals must be interactive and should lower the costs of the firm. Dean (2008) offers a contrasting view to IBM’s (2007) report. He found that although self-service systems experienced rapid growth, numerous customer complaints were lodged against the system. The basis of IVR is speech recognition accuracy and customers were experiencing recognition failures. In addition, there was a lack of choice to speak to a human consultant, background noise and static and the inability to understand customers who speak with an accent contributed to service failures. Dean (2008) concluded that the main driver behind IVR adoption was cost reduction rather than customer satisfaction.

3.6.4 Dealing with Customers on the Phone
Many business owners make and receive telephone calls on an ongoing basis but not many employees have professional telephone skills to make that first impression. Theron et al. (2003) and Ward (2010) identified the following collective weaknesses displayed by employees using a telephone:

- You cannot hear them
- You cannot understand them
- They cut you off when transferring you
- They speak down to you
- They use jargon when they talk to you
- They put you on indefinite hold
- They pass the buck to another person or department to solve the problem
- They provide misleading or erroneous information
- They may be rude

When the aforementioned telephone faux pas occurs, consumers will be left irate. Employees must realise that every time they receive a call they are the company to the other person on the line. Obviously a warm, friendly, sincere, courteous and tactful voice will make the customer’s experience a positive one (Obarski, 2010). Since visual cues are not
present in a telephone conversation, the employee has to harness their listening skills. Front line staff has to sound reassuring, interested and willing to help.

It is essential for all telephonists or call centre agents to work out a telephone script which they can use to answer the phone. A script is a list of pre-prepared statements that a person can use when answering a call. For example, to welcome a caller, enquire what their problem is, direct the caller to a specific person, clarify a point or end the conversation.

3.6.5 Skills Required when Dealing with Telephone Calls

Theron *et al.* (2003) highlighted the following as key areas of focus in terms of how to improve an employee’s professional telephone skill:

- **Get ready:** Sit up, take a deep breath as it relaxes and removes tension in your voice. Keep a paper and pencil at hand, together with forms that you may need. Be sure to record all necessary information legibly (Obarski, 2010).
- **Put on a telephone face:** Although nobody can see you smiling, there is a perception that smiling improves circulation and your emotional level; employees must be energetic.
- **Answer the phone quickly:** A general rule is that a phone must be answered on the third ring or in bigger environments within thirty seconds (Ward, 2010).
- **The three part greeting:** Always make sure that the first words that are spoken are your name, and the company or department you work for and an effective greeting. Identifying oneself enables the customer to reference his/her call with you later (Bailey & Leland, 2008; Obarski, 2010).
- **Speak clearly, naturally and distinctly:** This is so obvious but is always ignored and very often when you call a company you do not understand the first sentence that came across the telephone line. This is due to people answering the phone in a robotic manner. Enunciate words and speak into the telephone. Speak slowly, loudly and distinctly (Ward, 2010).
- **Listen:** This is the best way to understand the customer’s needs. Listen for at least seventy percent of the time and speak for thirty percent of the time. Some call centre operators though, tend to dominate the conversation overwhelming the customer. Ask questions related to the query to find a solution (Obarski, 2010).
➢ Ask for the customer’s name early in the conversation. This gesture usually pleases customers. In some instances if a query cannot be handled on the spot and a referral is needed, the agent needs to know to whom he/she is speaking (Ward, 2010).

➢ Transferring calls: Politely place the caller on hold and ensure that if a call is transferred to another agent, then that agent is available and brief the agent on the customer’s query so that the customer does not have to repeat himself/herself again (Bailey & Leland, 2008).

➢ Take responsibility for the problem: As an agent take ownership of the matter. Respond appropriately to the consumer’s needs immediately. Ask questions and if you need more time to resolve the query fully disclose this to the customer, taking down details and making sure to follow up.

➢ Be polite: Always be courteous and polite when dealing with frustrated consumers. Let them vent and then calmly restate the callers’ issues in your own words. Irate people normally settle down fast and often thank employees for their understanding (Timm, 2008). Thoughtfulness and friendly interest is always needed to gain trust and goodwill of all people.

➢ Your facts database: A good call centre agent will try and have all facts at hand. He will also keep track of all enquiries. This personal ‘facts database’ helps deal with enquiries and keeps the agent on the ball. A database with frequently asked questions (FAQ’s) is also recommended (Timm, 2008).

In the case of call centres, when a customer calls the company’s care line or help desk the call is automatically logged on a computer as is the conversation. The operator records the customers’ name, contact details and problem onto special software. According to Theron et al. (2003), the agent may be able to help the customer immediately or may refer the customer. When customers dial into a call centre their calls can also be answered by an automated service called an Interactive Voice Response facility (known as IVR), welcoming them to the company’s call centre. This IVR will inform the customer that their call is important and to please be patient in waiting for the next available agent. In the meantime, the customer has the option to listen to promotional deals or other offerings made by the firm (IBM, 2007).
Many consumers find the waiting tedious and frustrating and options that are offered do not cater for their specific needs. Another common frustration is that there is a lack of consistency when calling a call centre as you do not know which agent will receive your call and if this agent is efficient. Certain operators are trained to handle certain types of queries; this is the main purpose behind the menu options in an IVR system so that the customer is channelled to the right agents. Interestingly, Theron et al. (2003) have noted a marked increase in call centres in South Africa but emphasises that the country is falling short in terms of the people skills needed to implement and run such centres and the database technologies necessary to offer customer personalisation. This brings up a pivotal point in the discussion on striving for customer excellence which looks into how a service organisation can get its staff to give off their best at all times. In other words, understanding what characteristics staff perceive as appealing incentives to strive harder towards achieving the goals of the organisation.

3.6.6 Motivating Staff to Provide Excellent Service

According to Maslow’s Hierarchy of Needs, all individuals have needs and motivation is the drive that compels individuals to take action to satisfy their needs. Indeed, different individuals are motivated by different things. In an article featured on Articlesbase (2006) managers are said to also be in need of motivation in order to inspire their staff. The article found that hiring motivated professionals is easier to manage than motivating professionals. For example, at Disney only people that love cleaning and sweeping are hired to clean the theme park which is immaculate. Implementation measures must be put into place to monitor and promote performance through appropriate remunerative rewards. Toolpack Consulting (2010) found that empowerment and job entitlement tend to increase motivation. Toolpack Consulting (2010) suggested that employees must be involved in decisions that affect them and that staff initiatives must be rewarded if they work in the firm’s favour, as opposed to ordering staff to perform duties which creates social distance and should be avoided. According to Theron et al. (2003), some people may be easily motivated by financial gain and others by more time off. Motivation should be driven from the top down, but in the field of customer service, the individual service provider has to motivate itself to excel at the task of providing good service levels at all times, bearing in mind that customer
service is often a thankless job. Theron et al., (2003:161) suggest that staff should try these 5 steps to start motivating themselves:

- Put up quotations that you find motivating around your workstation so that they are visible throughout the day.
- Develop a strong self concept, because if you feel good about yourself this will impact on your performance.
- Set goals and do your best to achieve them.
- Read motivational books and messages that will make an impression on you.
- Have fun. The more fun you have, the more motivated you will be.

The need to acknowledge and appreciate the effort of staff by management can be highly motivating. Public commendation and praise can motivate even depressed customer service providers. Simple gestures like the ones listed below go a long way to creating happier staff:

- An extra 15 minutes given during break time by the boss to commend the effective handling of a customer.
- The entire group being rewarded with cakes because of excellent customer service.
- An agent receiving a personal note of thanks from the boss.
- An agent being given special mention in the firm’s newsletter.
- An agent being allowed to leave early to avoid traffic.

These public ‘rewards’ appeal to one’s need for recognition and motivates one to keep performing better each time.

There are three commonly used theories about motivation known as needs theory, incentives theory and expectancy theory (Armistead & Clarke, 1992). The success of firms often varies according to the overall spirit that exists among employees. Management naturally wants to achieve a high standard of service amongst staff and aim to create a motivating environment where staff can be fully committed to the customer (Blemi, 1995).

3.6.6.1 Needs Theory

This theory states that the behaviour of individuals is driven by their needs. Maslow separated the needs into five types, commonly known as Maslow’s Hierarchy of Needs.
Maslow’s needs are in ascending order and the needs at one level must be satisfied before those of the next level can be addressed (Armistead & Clarke, 1992; Cronje et al., 2006; Lamb et al., 2004). McClelland extended Maslow’s theory and said that needs are more influenced by social context and will vary from one culture to another. He suggests that needs which must be satisfied are:

- The need for achievement to meet targets.
- The need for affiliation to belong to the work group.
- The need for power to control and influence others.


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**Figure 3.1**

Maslow’s Hierarchy of Needs
McClelland also suggests that the balance of a person’s needs does not change over time. If this is true then it has implications for recruitment, selection and career development. It indicates that there may be problems caused by the changing role of the service and support personnel in ways that may not match their individual needs (Cronje et al., 2006; Lamb et al., 2004).

3.6.6.2 Incentives Theory
With regards to incentives theory, the external factors influence motivation. Hertzberg highlighted two factors that are important (Armistead & Clarke, 1992; Jones & George, 2009):

✓ Hygiene factors which include aspects of the job which a person expects to find in the job, for example, working conditions, wages and salary.

✓ Motivation factors which include achievement, recognition, responsibility and money.

Hertzberg implies that the hygiene factors in themselves will not motivate but if they are lacking then a person will be de-motivated. Money is complex and can be seen as both a hygiene and a motivating factor.

3.6.6.3 Expectancy Theory
The expectancy theory concentrates on how people make choices in the way in which they behave. It suggests that individuals will assess what they are required to do and make a rational assessment of what rewards will be gained from it. For example, people will perform well if they feel that they will be highly rewarded for their efforts (Armistead & Clarke, 1992). Three key concepts of this theory as outlined by Cronje et al. (2006) include the following:

发改委: This refers to the attractiveness of a specific outcome to an individual, for example, a person may prefer to be transferred to a new site to work from.

发改委: Refers to the strength of one’s belief that a certain performance will lead to a desired outcome.

发改委: Refers to one’s belief that a certain level of effort will lead to a particular outcome.
In addition to understanding the importance that motivation exerts on the level of performance of individuals, management has to remember that unlike goods, services are produced and consumed simultaneously; hence, the need to allow staff to exercise some degree of empowerment in performing their duties (Schiffman & Kanuk, 2004).

3.6.7 Empowerment
There is much debate about the empowerment for service personnel. This simply entails giving the front line service responsibility to act for themselves with the support of service managers (Armistead & Clarke, 1992; Schindlholzer, 2008) such that staff is allowed to act spontaneously to fully meet customers’ needs (Schindlholzer, 2008). Managers may enjoy this course of action as they see themselves supporting rather than directing activities. Empowerment, however, should be viewed from the individual’s perspective as some may see it as a threat to their job security, while others may see it as a motivator in the Hertzberg sense. Autocratic firms may not appreciate empowerment but firms with a strong service team may give support to the individuals, thereby strengthening the trust between members of the team and between the team and the service managers.

3.6.8 Beware of Burnout
According to Bailey and Leland (2008), numerous jobs that involve dealing with customer complaints are amongst the most stressful. This stress is as a result of constant pressure, mental exhaustion and physical strain and if left unchecked, can result in burnout. Symptoms of burnout include feeling powerless, hopeless, emotionally exhausted, isolated, irritable, frustrated and trapped. Burnout worsens slowly with time and follows four distinct phases (Bailey and Leland, 2008).

- Exhaustion: Includes feeling overwhelmed. Staff loses control of their schedule and feel mentally and physically drained.
- Uncertainty: Due to sheer exhaustion one is forced to cut corners. One’s vulnerability and insecurity surfaces.
- Abrasiveness: One is afraid to show what one is experiencing at work and thus tends to alienate oneself from family and colleagues with sarcastic and cynical attitudes.
Failure: By the time one gets to this phase all one’s inner defences have worn down. One becomes ultra sensitive and innocent remarks can cause one to take offense and over-react angrily.

It is also imperative to guard against burnout arising as a result of the work elements of monotony and the routine nature of the job associated with operations within the call centre. It is often a challenging task to keep staff motivated on a regular basis. Due to the monotonous and routine nature of work the turnover rates within call centres is often high. Fluss (2010) suggests that Interactive Voice Response and Web Self-Service can be implemented so that customers are able to handle largely routine queries on their own. This leaves the more exciting and challenging queries for agents to handle; thereby, reducing the monotony. In addition Fluss (2010) also suggests engaging in ‘buzz sessions’ which are normally about fifteen minutes in duration and are facilitated by the team leader in order to re-motivate his/ her team members. Regular training can also help to overcome the monotony.

3.6.9 Basic Qualities of a Good Call Centre

World Class call centres are those which adopt state of the art technology and all the effective systems for quick processing of inbound and outbound calls. This technology also facilitates the capturing and processing of essential customer information which is useful for market research, branding and other strategies (Suite 101.com, 2009). Aside from all of the qualities that have already been highlighted thus far in the study, another important attribute of employees is the need for multilingual agents. In a global market environment customers speak different languages and agents especially in South Africa should be fluent in English, Afrikaans and a few of the other official languages spoken in South Africa (Suite 101.com, 2009). Computer literacy is also considered critical as many call centres use web based software and operators need to be savvy.
3.6.10 Selection of Contact Personnel

Customer contact personnel should have personality attributes such as flexibility, tolerance for ambiguity, ability to monitor and change behaviour on the basis of situational cues and empathy for customers. Empathy tends to be more important than age, education, sales related knowledge, sales training and intelligence (Fitzsimmons & Fitzsimmons, 2006). Similarly, Julian & Ramaseshan (1994) deduced in their study on retail banking in Australia that staff must be more empathetic to the customer’s needs when selling a service.

No reliable tests exist for measuring people’s service orientation; however, interviewing techniques are among the most commonly used. Abstract questioning, the situational vignette and role playing are all used to evaluate potential front line employees.

- **Abstract questioning**: Involves asking open-ended questions in an interview. These would provide insight into the applicant’s ability to relate the immediate service situation to information collected from past experience. This line of questioning also reveals a person’s willingness to adapt. Careful listening by the interviewer for substance of an answer to an abstract question will lessen the possibility of being deceived (Fitzsimmons & Fitzsimmons, 2006).

- **Situational vignette**: In this type of interview, applicants must answer questions regarding a specific situation. Presenting a situation like this may reveal information about an applicant’s interpersonal capabilities, common sense and judgement. To gain more information about a candidate can be asked further questions like, for example, “how would you handle a very irate and insistent customer?”

- **Role playing**: Participants are placed in a simulated situation and react to it as if it was a real service environment. Role playing is used in the final phase of recruitment and provides the interviewer with an opportunity to observe the applicant under stress. Although it helps to uncover a candidate’s strengths and weaknesses in a realistic encounter, direct comparison of applicants is difficult.
3.6.11 Training

Most training manuals and employee handbooks are devoted to explaining the technical skills needed to perform the jobs. Unavoidable communication difficulties with customers require contact staff with training and interpersonal skills to prevent a bad situation from becoming worse. Programmes can be developed to train staff to use prescribed responses in given situations. This approach helps staff to anticipate exchanges and how to respond accordingly (Fitzsimmons & Fitzsimmons, 2006). A popular English editorial entitled callcentrehelper.com (2010) concluded that the most common skills needed in a call centre setting include good PC skills, excellent keyboard skills, good telephone manners, excellent communication skills and the ability to work well within a team.

According to Armistead & Clarke (1992), attention must be drawn to the knowledge, skills and abilities of applicants known as the KSA mix. Evaluation leads to a description of each category of work in terms of KSA’s required. The following are a list of potential KSA’s needed to perform a job properly:

- Technical skills: knowledge of products and their use, servicing and repairs.
- Procedures to be used in the job.
- Information systems used for maintaining records of customers and equipment.
- Interpersonal skills for communicating and building relationships.
- Appearance of service personnel.
- Time management to make optimal use of time.
- Selling skills.
- Team work to increase cooperative delivery.
- Self monitoring to assess own performance.

Assessing this KSA mix has implications for training, recruitment and selection for promotional purposes. Front line managers must be close to staff to help identify training needs. In terms of selection and recruitment, the main aim is for the firm to hire people whose culture matches that of the organisation and these staff will ultimately deliver to the customers. Townsend (2002) studied an important paradox within the call centre environment. He undertook an assessment of why firms engage in extensive recruitment and
training when the call centre industry records a high staff turnover and burnout. Townsend (2002) found that especially when dealing with inbound calls there has to be a perfect job-fit as the environment can be highly stressful. In some instances the job cycle times can be very short, leaving agents to deal with a high volume of calls; but in other instances the call cycle times are longer, more complicated and emotionally very draining. Hence, there is a strong need for training to develop skills (Armistead and Clarke, 1992). Townsend (2002) also agrees that although a large amount of resources are spent to conduct recruitment and training, which can be utilised elsewhere in the firm, the technical skills of agents has to be harnessed to develop their emotional labour abilities fully.

3.6.12 Team Building
Service teams are important as it gives managers the opportunity to act as coach to their teams. It also gives individuals the chance to learn from others to work towards achieving common goals. Teams also allow members to improve the value of their own KSA’s in order to stimulate the flexibility of the team (Armistead & Clarke, 1992). The achievements of the service team are to attain customer satisfaction and effectiveness in resource productivity. These will be measures of the effectiveness of the team, but the attainment of these achievements depends on:

- The clarity of what they are trying to achieve and who is involved in the process.
- The motivation of the individual team members and the system and process which allows the tasks to be done.
- The actions of the team leader. Rushmer (1997) uncovered several emergent themes in her research into team building which included the freedom to speak and get to know each other, refusal to accept leaders within a group, pooling together efforts for the benefit of the team, team spirit, having fun and motivation and a sense of achievement in terms of the tasks and outcomes of the team.

According to Armistead and Clarke (1992), the composition of the service teams should include front line people and back room people, so that there is no danger of both groups becoming isolated. Teams do not simply come together and perform well. They go through
four stages in their development to becoming an effective team. These four stages as outlined by Armistead & Clarke (1992) are:

- **Forming** whereby the team is simply a group of individuals without clear purpose of their tasks and duties.
- **Storming** arises as the team is often in conflict about the direction of goals and nature of leadership, and the role of individuals within the team (Adler, 2003).
- **Norming** occurs when the team becomes clear on tasks and goals and individuals start to become strongly committed to other members of the team (Fugaro, 2008). There is strong peer group pressure for individuals to conform to the values of the team.
- **Performing**, the final stage, where the real work is done with the team members sharing and supporting one another (Adler, 2003; Fugaro, 2008). It would seem that the clearer the nature of the tasks, the greater the degree of shared values of the service team members and the more likely it is that a service team will perform well; each member must understand their role within a team (Fugaro, 2008). Adler (2003) supports the view of team building and stresses that innovative ways of doing business to improve productivity should also be a goal. Sometimes a change is needed but should be embraced if the overall productivity of the firm will be enhanced.

### 3.6.13 A Team Coach’s Role

The role of the service manager as a team builder depends on their ability to act as coach to the team. In a study conducted by Tom Peters, as cited in Armistead & Clarke (1992), there are five roles for a good coach to adopt, namely:

- **Teaching** in order to:
  - Make the goals clear.
  - Give information to the team members.
  - Help team members to increase their skills and knowledge for the tasks.
  - Give feedback on performance and what is required.
  - Introduce new members to the ways of the service team.
- **Supporting**: This process entails aspects of empowering individuals. It requires coaches to encourage individual team members to give off their best and support them day-to-
day. The support may be through giving them a wider range of responsibilities or skills to conduct their jobs. Indications of good support are:

- Treating people as colleagues.
- Looking for opportunities to assist service and support staff.
- Discussing training needs and career opportunities regularly and acting on outcomes.

Leading: There are various leadership styles from authoritarian to laissez-faire. The most appropriate styles for coaching service teams include:

- Setting a good example.
- Challenging people to do their best.
- Caring about how people are doing.
- Being accessible to staff.
- Being open and honest.

Counselling: This entails seeking to deal with the problems that occur with the team members in an organisation in an open manner. For example, one of the team members may be underperforming as a result of personal problems. Some characteristics of good counsellors include:

- Active listeners who concentrate on what is being said rather than make assumptions on what is being said to them.
- Perceptive to the feelings of others.
- Willingness to spend time helping to resolve problems.
- Trustworthy with confidences.

Confronting: Confronting entails facing issues which need to be resolved. It may concern poor performance of a team member after counselling and training. It may concern confronting others outside the team who have an influence on the performance of the team, for example, suppliers of spares or services or members from other departments.

Kaye and Kleiner (1996) cited the work of John Wooden’s pyramid for use as a teaching tool in their research. The cornerstone of Wooden’s pyramid, according to Kaye & Kleiner (1996), was industriousness and enthusiasm because it is impossible to excel at something if you are not truly devoted to it. In addition the characteristics of friendship, cooperation, and
loyalty are also critical. The ‘anchor blocks’ of the pyramid are self control and integrity. Completing the second tier of the pyramid are alertness and initiative characteristics. The third tier which is the heart and soul of the pyramid entails conditioning, skill and team spirit. And finally, the two tiers completing the pyramid comprise of poise, confidence and competitive greatness.

Kaye & Kleiner (1996) list ambition, adaptability, resourcefulness, faith, fight, patience, reliability, integrity, honesty and sincerity as the threads holding the blocks together. They liken coaching to face-to-face leadership that pulls people from diverse backgrounds together and treats them like equal partners. Wooden’s coaching style respects individual uniqueness and abilities. A business coach must create an atmosphere that promotes individual growth and talent (Kaye & Kleiner, 1996).

Having undertaken an assessment of the attributes needed by front line staff in assisting them to execute their duties and responsibilities properly, it is obvious that this human resource component is one of the most critical aspects of customer service delivery. Another aspect which is also important is the customers themselves. A thorough understanding of how customers base their choice in terms of services provided, the levels of service delivery expected and building customer loyalty will be examined in the following section.

### 3.7.1 Customers

When buying products or services consumers generally engage in the consumer decision making process in order to make an informed decision prior to consumption.

#### 3.7.1.1 Consumer Choice

Zeithaml et al. (2006) suggest that the first area of consumer behaviour that marketers should be concerned with is how consumers choose and make decisions and the steps that lead to the purchase of a particular service.
3.7.1.2 Need Recognition
The process of buying a service arises out of a need or want. Maslow’s hierarchy of needs, as discussed earlier, specifies five need categories that begin with basic lower level needs and progresses to higher level needs (Hoyer & MacInnes, 2000; Lamb et al., 2000; Schiffman & Kanuk, 2004). Services can fill all these needs and are increasingly more important for higher level needs.

3.7.1.3 Information Search
Once a need is recognised consumers then seek information about the goods and services that can satisfy their needs. They can consult internal information sources like their experience in the past and external sources which include personal experience, personal sources (friends, family or acquaintances), public sources (advisors, magazine articles and the media) or resort to market controlled information such as advertising, sales promotion, personal selling, publicity or the internet (Lamb et al., 2004).

Zeithaml et al. (2006) associate a higher degree of perceived risk with the purchase of services as they are intangible. These risks can be categorised as financial risk, time risk and social risk. This increase in perceived risk can be concentrated by using strategies to reduce risks like offering guarantees and a high degree of employee training to provide reassurance to consumers.

3.7.1.4 Evaluation of Service Alternatives
Once the information has been gathered and an evoked set of alternatives has been reached, the consumer must decide which alternative best suites him/her.

3.7.1.5 Service Purchase
Consumers decide which goods and services to purchase. However, in the case of services because they are essentially produced and consumed in the same time much is still unknown at the point of purchase (Zeithaml et al., 2006). Due to this risk involved service providers offer free initial trials or extensive tours of their facilities to reduce these risks (Hoyer & MacInnes, 2001).
3.7.1.6 Post-purchase Evaluations
This is the final step in the decision making process, which allows consumers to judge if they have made the correct decision and whether the product or service is one that they will purchase again (Hoyer & MacInnes, 2001). According to Schiffman & Kanuk (2004), there are three possible outcomes of these evaluations:
- Actual performance matches expectations leads to a neutral feeling.
- Performance exceeds expectations, causing positive disconfirmation of expectations leading to satisfaction.
- Performance is below expectations causing negative disconfirmation of expectations leading to dissatisfaction.

Figure 3.2 outlines the steps in the consumer decision making process, discussed above, that consumers will either consciously or unconsciously engage in, in their assessment of which goods and services to purchase.

Figure 3.2
The Consumer Decision Making Process

Customers tend to buy goods and services as a result of a need. When purchasing these they have certain expectations in terms of service delivery. However, these expectations of what constitutes a good service tend to vary from one service organisation to another. For example, the experience of meeting with an accountant may differ greatly from that of meeting with your vet. Hence, the consumer has different levels of expectations for these two differing service offerings (Lovelock & Wirtz, 2004).

A consumer can form expectations of service standards through their own personal experience with the service provider, or they may compare the services of different service providers against each other. If a customer has not had prior experience then they may base their expectations on word-of-mouth comments, news, stories or on advertising, pricing and the internet which are all good sources of information (Lovelock & Wirtz, 2004).

3.7.2 Components of Customer Expectations
Customer expectations embrace several different elements including desired service, adequate service, predicted service and zone of tolerance which falls between the desired and adequate service levels (Lovelock, 2001). A closer examination of each of these will now be undertaken to assess the impact that they may have on customer expectations of service delivery.

3.7.2.1 Desired service
This level of service is the highest level as it is the level of service that the customer hopes or wishes that he/she could receive (Zeithaml et al., 2006). These expectations reflect the hopes and wishes of consumers and their belief of what the service can be and should be.

3.7.2.2 Adequate service
Most customers are realistic and realise that the firm cannot always deliver the desired level of service, so they have a level of service called adequate service which is the minimum level of service that customers are willing to accept without being dissatisfied. Among the factors that set this expectation are situational factors that affect the service performance as well as the level of services that might be anticipated from alternative suppliers (Lovelock,
The levels of both desired and adequate service expectations may reflect the promises made by the provider, word-of-mouth comments and the customer’s past experience.

### 3.7.2.3 Predicted Service level
This is the level of service that customers anticipate that they would receive; this directly affects how they define adequate service on that occasion. If good service is predicted, the adequate level will be higher than when poorer service is predicted (Lovelock & Wirtz, 2004).

### 3.7.2.4 Zone of Tolerance
Services are heterogeneous and may vary across providers, across employees from the same provider and even with the same service employee. The extent to which the customers recognise and are willing to accept this variation is referred to as the zone of tolerance (Hoffman & Bateson, 2006). If service drops below the adequate service – the minimum level considered acceptable - then customers become frustrated and this impacts on their levels of satisfaction. However, if service performance is higher than the zone of tolerance at the top end – where performance exceeds desired service - then customers will be satisfied with the service (Zeithaml et al., 2006).

The zone of tolerance is like a range or window in which customers do not take note of service performance. But if the performance falls outside the range, the service gets the customer’s attention in a positive or negative way. For example, if waiting in a line at a grocery store to pay for purchases, the customer holds a range of acceptable time for service of between 5 or 10 minutes. If the services are rendered within 2 or 3 minutes of waiting, then the customer judges the service received as excellent. But if the customer has to wait longer than the anticipated 10 minutes, he/she may become impatient. The longer the wait is below the zone of tolerance, the more frustrated and dissatisfied he/she becomes (Zeithaml et al., 2006). Figure 3.3 illustrates the various factors that influence customer expectations of service that have thus far been highlighted.
A customer may have different service level expectations and perceptions of service quality.

3.7.2.5 Sources of both Desired and Predicted Service Expectations
When a consumer is interested in purchasing services, he/she is likely to seek information from various different sources like calling a friend or calling in at a store or watching television advertisements more closely. In addition to these active and passive types of
external sources, consumers can also review information held in their memory about past service encounters (Zeithaml et al., 2006). There is one internal and three external factors that influence the desired and predicted service expectation.

These factors are as follows:

- **Explicit service promises** are personal and non-personal statements about the service made by the firm to customers. These explicit service promises are one of the few influences on expectations that are completely in control of the service provider. However, over-promising to obtain business can create a problem in that it is difficult to customize service. The firm has to be guarded in terms of what it promises to its customers as failure to meet these promises will lead to dissatisfaction (Hoffman & Bateson, 2006).

- **Implicit service promises** are services related cues that lead to perceptions of what the service should and will be like (Zeithaml et al., 2006). These cues are dominated by price and tangibles associated with the service. Generally, the higher the price and the more impressive the tangibles, the more the customer will expect of the service.

- **Word-of-mouth communications** are personal and non-personal statements made by parties about the firm and convey to consumers what the service will be like and they influence predicted and desired service levels (Lovelock, 2001). This form of communication is very important for services that are difficult to evaluate. Experts like consumer reporters Isabel Jones and Wendy Knowler, for example, are powerful word-of-mouth sources that can affect the levels of desired and predicted service.

- **Past experience** is the customer’s previous exposure to services and is critical in influencing his/her predictions and desires (Hoffman & Bateson, 2006).

In general, managers must be able to understand the expectations of consumers. They have to know the relative weight of word-of-mouth, explicit service promise and implicit promises and how this shapes the desired and predicted service (Hoffman & Bateson, 2006; Lovelock, 2001; Zeithaml et al., 2006).
Firms are afraid to ask a consumer what their expectations are for fear that these might be unrealistic and that the firm will set itself up for very high levels of expectations. However, research shows that the consumers’ expectations are rather basic in nature (Zeithaml et al., 2006). Consumers want services to be delivered as promised and expect service companies to do what they are supposed to do. The ability of the firm to give the customer regular progress updates as to how service is improved to address their needs shows that the firm is making an effort to improve service. Some firms though, under-promise their service to the customer and in doing so reduces the customer’s level of service expectations. This, in turn, assists the firm to increase the chances of exceeding customer expectations. While under-promise may narrow the gap between expectations and perceptions, it may reduce the competitive appeal of the offer (Lovelock & Wirtz, 2004; Zeithaml et al., 2006).

In terms of service delivery, the next question that needs to be addressed is that of customers’ perceptions of services. According to Zeithaml et al. (2006), perceptions by consumers are formulated by assessing the quality of the service and how satisfied they were with the overall service experience.

### 3.7.3 Customer Perceptions of Services

Most practitioners use the terms quality and satisfaction interchangeably but researchers stressed the need for greater precision (Lovelock, 2001; Wilson, Zeithaml, Bitner & Gremler, 2008, Zeithaml et al., 2006). Zeithaml & Bitner (2003) suggest that although there are certain common characteristics between the two, satisfaction should be seen as a broader concept, whereas service quality focuses specifically on dimensions of service; therefore, perceived service quality is a component of customer satisfaction.

In addition, Lovelock (2001) argues that perceived service quality is one component of customer satisfaction; there are others such as price–quality tradeoffs and personal and situational factors. Zeithaml & Bitner (2003) argue that service quality is a focused evaluation that reflects a customer’s perception of elements of services such as interaction, quality, physical environment quality and outcome quality and these elements are then
evaluated based on service quality dimensions as stipulated in the SERVQUAL model, namely, reliability, assurance, responsiveness, empathy and tangibles.

3.7.4 What determines Customer Satisfaction?
Zeithaml et al. (2006) and Wilson et al., (2008), suggest that customer satisfaction is influenced by the following factors:

- Customer emotions: such as mood, state or life satisfaction.
- Product service features: for example, at a resort, hotel availability of a pool, room comfort, privacy and helpfulness and courtesy of staff would influence satisfaction.
- Attributions for service success or failure: for example, a customer of a weight loss organisation fails to lose weight as hoped will search for likely causes such as ineffective diet plans, or her inability to follow the diet.
- Perceptions of equity and fairness: customers compare their treatment with other customers to ascertain if they have been treated fairly. They also compare the prices paid for services and question if these are fair.
- Other consumers, family members and co-workers: consumer satisfaction is often influenced by other people. For example, to test the satisfaction of a family vacation one has to consider the individual expressions of each member in the family to ascertain satisfaction levels.

In the event of an organisation being unable to meet the demands of a customer efficiently, such that dissatisfaction has occurred, this is referred by firms as a service failure encounter. The next section undertakes an analysis of this service failure encounter in terms of how it can be categorised, analysed and rectified via strategic means so that this situation can be avoided in the future.

3.7.5 Service Failures
Hoffman & Bateson (2006) suggest that although hundreds of customer complaints are received by a firm pertaining to service failures, ultimately these complaints (service failures) can be categorised into one of four main groups:
Service Delivery System Failures

These system failures relate to the core service offering of the firm. Generally, the service delivery system failure consists of employee responses to three types of failures, namely:

- Unreasonably slow service: customers perceive that the service or the employee as being extraordinarily slow in fulfilling their functions (Helms & Mayo, 2008).
- Unavailable service: which are services that are normally available but are lacking or absent.
- Other core service failure: This category is very broad to reflect various core services offered by different industries, for example, financial services, healthcare and insurance. According to Hoffman & Bateson (2006), each of these has their own unique set of core service issues.

Failures relating to customer needs and requests

The second type of service failure pertains to employee responses to individual consumer needs and requests. Hoffman & Bateson (2006) as well as Hoffman et al. (2009) argue that the customer needs can be implicit, that is, not requested or explicit, that is, overtly requested. Although India has adopted call centres in an effort to improve customer satisfaction, Gupta (2006) believes that satisfaction levels are compromised largely due to negligent attitudes, lack of information and delays in service delivery. There are four types of possible failures when dealing with customer needs and requests:

- An employee response to special needs involves complying with requests based on a customer’s special medical, dietary or language difficulties.
- Customer preferences require modification of the service delivery system to meet the preferred needs of the customer.
- Customer error involves a situation in which a customer admits to a mistake thereby resulting in a service failure, for example, losing a hotel key (Helms & Mayo, 2008).
- Employee responses to disruptive others require employees to settle disputes between customers, such as requesting patrons to be quiet at the movie theatres.
**Unprompted/unsolicited employee actions**

Gupta (2006), Hoffman & Bateson (2006) and Hoffman *et al.* (2009) are of the opinion that the third type of service failure pertains to events and employee behaviours – both good and bad that are totally expected by the customer. The subcategories in this group include:

- **Level of attention:** refers to the positive and negative levels of attention experienced by the consumer. A positive level of attention would be when an employee goes out of his/her way to pamper a customer and a negative attention is when a customer is met with an indifferent attitude from an employee.

- **Unusual action:** can have both positive and negative effects. A positive action like going beyond the call of duty to assist a customer who has locked his keys in his car will lead to a positive response from the customer whereas employee actions such as rudeness, abusiveness and inappropriate touching would qualify as unusual negative actions.

- **Cultural norms:** refer to actions that positively reinforce norms, such as equality, fairness and honesty or violation of norms of society such as lying, cheating and stealing are negative.

**Problematic customers**

The final category of service failure occurs where neither the firm nor the employee is at fault for the service failure. In this situation the fault lies with the customers own behaviour such as drunkenness, verbal and physical abuse, breaking company policies or uncooperative customers (Hoffman *et al.*, 2009).

### 3.7.6 Customer Response to Service Failures

According to Lovelock (2001) and McCole (2004), customers have the following options available to them in the event of them experiencing a service failure. The customer could either:

- Do nothing.
- Complain in some form to the service firm.
- Take action through a third party (consumer advocacy group, consumer affairs or regulatory agencies and civil or criminal courts).
➢ Abandon this supplier and discourage other people from using the service (negative word-of-mouth).

According to Zeithaml et al. (2006) and Helms and Mayo (2008), many customers are passive about dissatisfaction and are content not to take any action. Voorhees & Brady (2005), note that voicing complaints is effortful. However, it is these customers that do not complain who are less likely to return and do business with the firm again. Studies indicate that the majority of complaints are made at the place where the product was bought or the service received (Helms & Mayo, 2008; Lamb et al., 2004; Lovelock, 2001; Zeithaml et al., 2006). Research findings also show that consumers from high income households are more likely to complain than those from lower income ones and that the younger people tend to complain more than older consumers (Helms & Mayo 2008; Lovelock, 2001).

Lovelock (2001) and McCole (2004) also found that people who are more knowledgeable about the products in question tend to complain. Three primary reasons why dissatisfied consumers do not complain, according to Lovelock (2001), are:

❖ They did not think it was worth the effort.
❖ They decided no one would be concerned about their problems or about resolving it.
❖ They did not know where to go or what to do.

Zeithaml et al. (2006) believe that some customers tend to blame themselves for the service failure. They engage in emotion-focused coping to deal with negative experiences that they may have encountered. These consumers engage in self blame and denial and believe that they do not deserve redress. Zeithaml et al. (2006) also believe that consumers will complain about expensive, high risk services rather than less expensive, frequently purchased services. These less expensive services are not important enough to warrant the time to complain. Ashley and Varki (2009) found that attitudinally loyal customers would be inclined to complain to the firm only if the rewards were to justify the efforts. The rewards of complaining can be explored from an economic and psychological viewpoint. The economical benefits include continuing with a service that one has enjoyed in the past without switching to a new service provider. The psychological benefits include the
obligation that one feels towards a firm and, hence, one feels compelled to complain to the firm that one is loyal to. Ashley & Varki (2009) also proposed through their research, that if customers are attitudinally loyal to a firm then they refrain from engaging in negative word-of-mouth communications.

Hess, Ganesan & Klein (2003) provide support for the proposition that loyal customers will respond favourably to service recovery because they are interested in relationship continuity with the firm; hence, customers lower their service recovery expectations and are more satisfied with an adequate service recovery then consumers not interested in relationship continuity.

Lovelock (2001), Lamb et al., (2004) and Zeithaml et al., (2006) explored the different actions that a dissatisfied consumer could choose to complain about during a service failure. A consumer can choose to complain on the spot about the service, in which case the firm can respond immediately. This is the best solution as the firm is given a chance to remedy the situation immediately and avoid negative publicity. Customers may opt to complain later via telephone, in writing or via the internet or call centre. This type of complaining behaviour is referred to as voice responses or seeking redress.

Some consumers choose not to complain directly to the service provider but would rather spread negative word-of-mouth about the company to all of their acquaintances. Negative word-of-mouth communications can be harmful to the firm’s image. Due to technological advancements complaints can also be lodged via the internet. Websites have been created to facilitate customer complaints. However, the internet has also opened up new ways to spread negative word-of-mouth about the firm (Schiffman & Kanuk, 2004). Disgruntled customers set up their own websites conveying their unhappiness against the firm in ways designed to convince other consumers of the firm’s incompetence (McCole, 2004; Wilson et al., 2008).

Finally, customers can choose to complain to third parties. They could consult consumer councils, licensing authorities and the government. Whether consumers choose to take
action or not, they ultimately determine whether to patronize the service provider again or to switch to another provider.

Another area which also contributes to service failure is waiting lines in an organisation. Waiting lines are a common problem in services that require a high degree of customer contact (Metters et al., 2006).

### 3.7.7 Waiting Lines

A queue is a line of waiting customers who require service from one or more servers. Queues do not necessarily have to be a physical line of people but could also refer to people being placed on hold by a telephone or call centre operator. The servers are those individuals that are responsible for administering the service to the customer (Fitzsimmons & Fitzsimmons, 2006). Waiting is a part of everyone’s life and can be very time consuming. The process of waiting at the beginning of the service process can have a major effect on the customer’s view of the entire service process. They may either view the service as favourable or view it with a highly critical eye depending on their up-front wait (Metters et al., 2006). Firms need to properly analyse waiting lines to ascertain accurate numbers of staff needed to provide services to the waiting customers whilst at the same time reducing the long waiting lines. Both Fitzsimmons & Fitzsimmons (2006) and Metters et al. (2006) believe that waiting lines have an overall psychological impact on customers. If a customer is holding on for an available consultant, for example, then they should be entertained either with music or company promotions to keep them occupied and to prevent them from becoming impatient. There are advanced statistical queuing models which are available for organisations to implement in order to ensure that this process is well implemented and managed and thus prevent a service failure from occurring.

We have observed the possible causes of service failure so it now becomes imperative to look at ways to recover once a service failure has occurred.
3.7.8 Service Recovery

According to Zeithaml et al. (2006:214), “service recovery refers to the actions taken by an organisation in response to a service failure”. A service failure can occur for all kinds of reasons such as the unavailability of the service promised, or late or slow delivery of the service. Nonetheless these, service failures instil a negative feeling or response in the customers. Ignoring a service failure is dangerous and can lead to the customers leaving or engaging in negative word-of-mouth communications as already highlighted (Hoffman et al., 1995). However, Tax & Brown (2000) and Hess, Ganesan & Klein (2003), have shown that a well enacted service recovery performance can help to overcome customer disappointment and anger and can even salvage a relationship.

Mattila & Cranage (2005) highlight that service failure is inevitable due to human frailties especially in high contact services. Managers are critically aware that recovering from such failures is essential for customer retention; the challenge, however, is how to achieve this effectively (Hoffman et al., 1995). Mattila & Cranage (2005) explored the possibility of allowing the customer to exercise some choice over the delivery of some components of the service. In order for the provider to gain a competitive advantage, customers were encouraged to be co-producers of the service. They agree that giving customers some control of the service process can be viewed as customer participation in service production. In this way, should service failure arise then the customer should share part of the responsibility for the failure (Mattila & Cranage, 2005). In this regard, Benapudi & Leone (2003) found that offering people a choice to co-produce a service led to higher satisfaction levels when the outcome was worse than expected.

3.7.9 Customer’s Recovery Expectations

Zeithaml et al. (2006) has found that customers do not expect extreme actions from service providers in the event of service failure situations. They do expect an apology when things go wrong and a company that provides one demonstrates courtesy and respect. Customers also wish to understand what is going on to ensure that the problem does not recur again and for a firm to accept accountability for their action or inaction. Boshoff & Leong (1998) found that an apology was an essential first step in service recovery. Customers also want
justice and fairness in handling their complaints. According to the service recovery experts, Tax & Brown (2000) & Zeithaml et al. (2006), there are three specific types of justice that customers seek following a complaint, namely, outcome fairness, procedural fairness and interactional fairness.

### Outcome fairness/Distributive fairness
Customers expect outcomes or compensation that matches the level of dissatisfaction. Compensation can take the form of money, an apology, future free services, reduced charges or repairs (Zeithaml et al., 2006). Customers expect equity in the exchange as they want the firm to feel that the company has paid for their mistakes in a manner that is equal to what the customer has suffered. They also expect quality so they want to be compensated no more or less than other consumers who have experienced the same type of service failure (Hoffman et al., 1995). An opportunity to exercise choice in terms of compensation is also greatly appreciated by the customer (Wilson et al., 2008).

### Procedural Fairness
Customers can also expect fairness in terms of policies, rules and timeliness of the complaint process (Zeithaml et al., 2006). Duffy, Miller & Bexley (2006) cited the findings of Hart et al. (1990) in their paper which suggested that the best way to recover from service mishaps is for front line workers to identify and solve customer problems. Front line workers record the quickest response and enjoy high levels of customer satisfaction. Customers want the easiest access to the complaint process and they want things handled quickly. Fair procedures are characterised by speed, clarity and the absence of hassles or problems (Wilson et al., 2008). Unfair procedures are those that the customers perceive as slow and prolonged or when customers have to prove their case – when the assumption seems to be that they are wrong or lying (Zeithaml et al., 2006).

### Interactional fairness
Customers expect to be treated politely, with care and honesty. This type of fairness can dominate others if the customer feels that the firm and its employees have uncaring attitudes. Duffy et al. (2006) conducted a study on service failure in a banking environment and found
that annoyed customers expected compensation, greater responsiveness, an apology from
top management and assurances that the problem would not recur. A lack of training and
empowerment, according to Zeithaml et al., (2006), can be attributed to a front line
employee being uncaring especially if the customer is angry or rude, due to the fact that the
front line employee has no authority to compensate a customer. Kau & Loh (2006) found
that the manner in which management and employees communicate with customers and the
efforts to resolve conflicts results in greater customer satisfaction or dissatisfaction. Blodgett
et al., (1997) found that interactional fairness has the strongest effect on customers’ re-
patronage intentions and negative word-of-mouth intentions.

According to a study by Kau & Loh (2006), of the three types of justice highlighted above,
distributive justice is significantly and positively related to satisfaction with service
recovery. These findings are consistent with the results of previous studies where
distributive fairness has the greatest impact on customer satisfaction (Duffy, Miller &
Bexley, 2006). By contrast Miller & Robbins (2004), found that perceptions of both
distributive and procedural fairness has had significant influence on customer reactions.

Interactional and procedural justice played a significant but lower role in impacting on
customer satisfaction. Kau & Loh (2006) also found a positive link between customer
satisfaction and service recovery that related primarily to trust. Remedying a service failure
could help to reinstall that trust of customers in the service provider. Miller & Robbins
(2004) found that relationships between loyal customers and service providers is based on a
great degree of trust, loyalty and commitment and that loyal customers favour procedural
fairness greatly. It is logical to assume then, that loyal customers would temper negative
reactions and consequences of service failure.

3.7.10 The Art of Service Recovery
Consumers who complain about the firm provide them with the chance of attempting to
recover from a service failure. According to Hoffman & Bateson (2006), in the event of
service delivery failure, the contact personnel have the primary responsibility of reacting to
a complaint. In attempting to recover well from a service failure, firms experience what is
termed a service recovery paradox. Hoffman & Bateson (2006:371) define the service recovery paradox as “a situation in which the customer rates performance higher if a failure occurs and the contact personnel successfully recover from it than if the service had been delivered correctly in the first place”.

### 3.7.11 Service Recovery Strategies

According to Zeithaml et al. (2006), the following recovery strategies can be adopted by a service provider who has experienced a service failure:

- **Encourage and track complaints**
  Firms can utilise a number of ways to encourage and track complaints. Administering satisfaction surveys and critical incident studies, toll free call centres, e-mail and pagers are all effective tools that can be used to facilitate, encourage and track complaints (Hoffman et al., 2009; Wilson et al., 2008).

- **Act quickly**
  Customers want quick responses to their complaints. These quick responses require system procedures to be in place to facilitate quick action as well as empower employees to handle complaints quickly (Schindlholzer, 2008). Problems can be dealt with quickly by better empowering employees to solve problems as they occur and to prevent them from escalating out of control. Customers can also be given an opportunity to handle their own service needs and fix their own problems by directly interfacing with the firm’s technology.

- **Make the Service ‘Fail Safe’ – Do it Right the First Time**
  Zeithaml et al., (2006) believe that the first rule of service quality should be to do it right the first time, thereby eradicating any need for service recovery. Reliability is the most important dimension of service quality across industry contexts. Organisations are advised to adopt total quality management (TQM) practices aimed at zero defects. According to Chase (1996), a service operations specialist, services should adopt the TQM notion of poka yokes to improve reliability. Poka yokes are automatic warnings or controls in place to ensure that mistakes are not made; hence, they can be seen as quality control mechanisms (Wilson et al., 2008).
Provide Adequate Explanations

The firm’s ability to provide an adequate explanation for the service failure can reduce dissatisfaction. The explanation must have two primary characteristics to be perceived as being adequate. Firstly, the content of explanation must be appropriate and reflect the relevant facts and vital information that are important to help the customer to understand what went wrong. Secondly, the style of the delivery of the explanation can also reduce dissatisfaction (Schindlholzer, 2008).

Treat Customers Fairly

Customers expect fair treatment in terms of the outcome they receive, the process by which the service recovery takes place and the interpersonal treatment that they receive (Wilson et al., 2008).

Cultivate Relationships with Customers

Customers that have strong relationships with the firm tend to be more forgiving in the event of service failure. Strong relationships between the firm and the customer can help reduce the effects of service failure on customer satisfaction (Hess, Ganesan & Klein, 2003; Ashley & Varki, 2009).

Learn from Recovery Experiences

Tracking service recovery efforts and solutions enables managers to learn about systematic problems in the delivery system that need fixing. Firms can, thus, identify the sources of the problem and modify processes, sometimes eliminating the need for recovery completely (Schindlholzer, 2008; Wilson et al., 2008).

Learn from Lost Customers

Market research investigating reasons for customers leaving can assist in preventing failures in future. This type of research is difficult and painful for companies but is essential to prevent the same failures from occurring again. Schindlholzer (2008) proposed the empowering of front line employees, facilitating adequate training and expediting the decision-making process as being advantageous during recovery attempts.
From the analysis undertaken it is evident that service recovery strategies are critical to customer satisfaction. To this end, every effort must be made to ensure that services are executed with precision in order to build stronger, loyal ties with customers.

3.7.12 Customer Retention
Simply stated, according to Hoyer & McInnis (2001), Hoffman & Bateson (2006) & Baldwin (2007), the concept of customer retention refers to focusing the organisation’s marketing efforts toward the existing customer base. Instead of seeking new customers, firms are now engaged in customer retention efforts to work with and satisfy existing customers with the aim of building long term relationships between the firm and its current clientele for the purpose of growing the business (Hoyer & McInnis, 2001; Rust et al., 1996).

Marketers have reacted to this new environment of brand parity and non-brand loyalty by choosing to chase new customers. This term is referred to as conquest marketing (Hoffman & Bateson, 2006). Typical incentives offered during conquest marketing include discounts and markdowns and due to the customers’ lack of brand loyalty the results obtained through conquest marketing are enjoyed only in the short term. Many firms experience tremendous growth rates in terms of their customer base but due to this acceleration they are not able to handle consumer queries and complaints efficiently and hence, in the long term tend to lose customers as a result of poor service (Rust et al., 1996).

Hoffman & Bateson (2006) concur that customer retention has become increasingly important due to changes in the marketing environment. A few reasons for customer retention is due to the increase in competition which includes the relative parity and lack of differential advantage of goods and services on the market, deregulated industries that compete for customers in an open market, the growth of online alternatives and accessible market information that is available to more firms (Gonzalez, 2008).

Added to the importance of customer retention is the fact that marketing practices are becoming very expensive, especially mass marketing which is the primary tool being used
by conquest marketers. There have also been marked changes in the firm’s distribution channels being used. In many cases, the physical distance between producer and consumer is increasing. Transactions can be undertaken by phone or mail order and the internet thereby limiting physical contact further (Gonzalez, 2008). Another change in the channel of distribution is the use of third parties to assist in the transactions between the firm and its customer. Although the use of third parties can expand a firm’s market coverage, it can also adversely affect retention rates due to poor performance.

Consumers today are more informed, command more discretionary income and are sceptical about the firm’s concern for their business; so naturally firms engaged in retention practices are usually noticed by today’s consumers. Since customers cannot be held captive, the only way to prevent defections is to outperform competitors continually. This can be done through soliciting feedback from defecting customers so that the firm is able to continually improve service delivery (Reichheld & Sasser, 1990). These two authors coined the phrase “managing for zero defects”, whereby every effort is made by firms to retain loyal customers through service perfection.

Numerous benefits have been cited for building and maintain stronger existing relationships with customers. Hoffman & Bateson (2006) isolate a few key benefits:

- **Profits derived from sales**: A key benefit for customer retention is repeat sales. Customers are also willing to pay more for a firm’s offering as a result of becoming accustomed to the firm’s offerings (Gonzalez, 2008; Lake, 2010).

- **Profits from reduced operating costs**: The Pareto Principle referred to by Schiffman & Kanuk (2004) shows that it costs three to five times less to keep a customer than to get a new one. Due to the trusting nature of relationships between the firm and its old customers, the latter are more receptive to the firm’s marketing efforts, which lead to lower costs for the firm’s marketing efforts (Ashley & Varki, 2009). Old customers have lower maintenance costs because they are familiar with the firm, employees and procedures so they ask fewer questions and need less attention.

- **Profits from referrals**: Another benefit is the positive word-of-mouth advertising generated by satisfied customers. Existing customers are necessary in order to develop a
reputation that attracts new business. Satisfied customers often refer business to friends and family reinforcing their decisions (Reichheld & Sasser, 1990).

3.7.13 Tactics for Customer Retention

Hoffman & Bateson (2006), Baldwin (2007) and Shulock (2010) stress that firms should maintain the proper perspective and remember that the firm ultimately strives to please the customer so being rude is short-sighted. It is important to set customer retention goals and link goals to the bottom line ensuring that specific measures are in place to measure the firm’s retention efforts of customers. Perhaps incentives like performance bonuses would help staff in meeting retention requirements. Also liaise, with customers if they wish to drop the firm’s services (Baldwin, 2007). Always remember customers between calls and contact customers between service encounters to build long term relationships. Typical approaches include sending birthday cards, get well cards and congratulatory e-mails (Baldwin, 2007; Lake, 2010). Building trusting relationships through honesty, integrity and reliability, according to Hoffman & Bateson (2006), includes protecting personal information of customers, refraining from making disparaging remarks about other customers, being truthful, providing full disclosure whether the information is positive or negative, being courteous and becoming involved in community affairs (Miller & Robbins, 2004; Shulock, 2010).

Monitor the service delivery process because due to the inseparability of services the customer must be involved in the delivery process (Baldwin, 2007). If the firm monitors this process, they are able to spot flaws in the delivery process that may impact on satisfaction levels and can correct these inadequacies of service quality prior to completion. Properly install equipment and train customers in using the product as proper installation, training and use of products save the customer from frustration or further dissatisfaction (Hoffman & Bateson, 2006; Singh, 2006). The firm should always be there when needed most so that when customers return products or complain about services the firm is proactive in dealing with queries.

Provide discretionary effort by going beyond the call of duty to assist customers. One may ask if it is always worthwhile to keep a customer. Some experts believe that the customer is
not worth saving if their account is no longer profitable, conditions in the sale of contract are no longer met, customers are abusive to the point of it impacting on staff morale and if the customer’s reputation is very poor that an association with that customer harms the firm’s image.

3.7.14 Emerging Customer Retention Programs

There are many new marketing programs that have recently surfaced that typify the recent interest in customer retention strategies such as frequency marketing, relationship marketing, after-marketing, service guarantees and defection management (Hoffman & Bateson, 2006).

With frequency marketing the key is to make existing customers more profitable. Frequency marketing thus combines the use of data collection, communications, recognition and rewards to build lasting relationships (Lake, 2010). The firm collects data on their best customers in order to ascertain their relationship with the firm. The next step is to liaise with customers on a personal level and facilitate the two way communication process. For example, firms such as Edgars send out daily correspondence to their key customers offering a whole host of additional services as a result of the customer’s excellent track record with the organisation.

Relationship marketing is also a mechanism used to develop and harness long term relationships with the customer. Relationship marketing takes place at two levels, namely, the macro and micro level. At the macro level, the firm recognises that the marketing activity impacts on consumer markets, employee markets and supplier markets. Simultaneously, at the micro level the firm realises that the focus of marketing is changing from completing the single transaction to building long term relationships (Hoffman & Bateson, 2006).

After-marketing emphasises the importance of following up, after the initial sale has been made. Some of these techniques commonly used include establishing customer databases so as to facilitate communication at a later stage, measuring customer satisfaction and making
improvements based on feedback (Baldwin, 2007; Lake, 2010). The firm can also establish formal customer communication programs such as newsletters that convey information to the customer on the firm’s efforts to improve service quality. After-marketing has to be introduced as a culture within the firm, so that every member of staff strives to reinforce this culture within the firm.

Service guarantees have been the most innovative and intriguing of the customer retention strategies introduced thus far (Hoffman & Bateson, 2006). Although guarantees have been in use for a while now they are new with respect to services, overall these guarantees serve to reinforce customer loyalty, build market share and force the firm offering the guarantee to improve its overall service quality (Wilson et al., 2008). Service guarantees are said to have three main functions which are: to serve as a quality tool, a marketing tool and a customer service tool. McColl et al. (2005) conducted research and found that an effective guarantee should be unconditional, easy to understand, heavily promoted, simple and obvious, meaningful to customers, easy to invoke and fast to collect and be credible. Where possible they should also specify the payout, avoid complex legal jargon, use big print and when the customer invokes the guarantee staff should not quibble. Research undertaken by McColl et al., (2005) claims that service guarantees encourage dissatisfied consumers to complain to the service provider after experiencing service failure; thereby, allowing the firm to restore satisfaction and maintain loyalty. However, as important as a service guarantee is, McColl et al., (2005) and Singh (2006) found that there is no support that service guarantees will always encourage dissatisfied consumers to complain, a guarantee though can only improve the level of service during the recovery process. The customer may choose to take no action in the event of service failure irrespective of whether a guarantee is available or not.

Finally, another way of increasing the customer retention rate is by reducing customer defections. Defection management involves tracking the reasons that customers defected and use this information to continuously improve the service delivery system. Cutting defections in half doubles the average firm’s growth rate (Hoffman & Bateson, 2006; Reichheld & Sasser, 1990). Having explored the importance of customer retention it now becomes clear why customer loyalty is important within a service organisation. According to the ‘Pareto
Principle’, successful firms see eighty percent of their business coming from twenty percent of their customers (Schiffman & Kanuk, 2004). This in itself displays a strong need to build a good relationship with customers in the long term.

3.7.15 Tips to Build Customer Loyalty
According to All Business Consulting (2010), too many firms tend to neglect loyal, existing customers in pursuit of new customers. Since the cost associated with attracting new customers is higher, as previously outlined, efforts should move towards building customer loyalty. The following are some of their tips to achieve this goal.

- Communicate: Reach out to one’s customers whether via email, newsletter, reminder cards or holiday greetings (Lake, 2010).
- Customer service: Go the extra distance to meet customer needs and train staff to do so as customers tend to remember good treatment (Singh, 2006).
- Employee treatment: Loyalty should be filtered from the top down. If you are loyal to employees, he/she will feel positive about his/her job and pass on the loyalty to customers (Bansal & Gupta, 2001).
- Employee training: Train employees in the manner that you want them to interact with customers. Empower employees to make decisions that benefit the customer (Hoyer & McInnis, 2001).
- Customer incentives: Give customers incentives to return to your business. For example, allow discounts on purchases or reduction in sales prices. Bowen and Chen (2001) reveal that there is a strong relationship between loyal customers and profitability.
- Product awareness: Have full knowledge of what customers purchase on a regular basis and stock up on these items. Ensure that staff understands everything about your product.
- Reliability: Stick to dates and times and avoid inconveniencing your customers through delays.
- Be flexible: Solve problems or complaints to the best of your ability. Do not make excuses as this leads to irate customers.
According to Waters (2010), in addition to the tips highlighted above firms may also choose to do some of the following in an attempt to build customer loyalty:

- Satisfy the customer: This is the easiest and most affordable way to build customer loyalty. However, due to varying personalities it may be impossible to please every person. A basic rule to remember is to treat customers the way you want to be treated. Always greet customers, offer assistance if and when needed, offer expert advice, provide services that exceed customers’ expectations and thank every customer for his/her service (Singh, 2006).

- Acknowledge the customer: Introduce yourself to the customer and if he/she does the same use their name in creating dialogue and ultimately, a relationship that reinforces loyalty.

- Reward the customer: To some customers a real reward may just be a simple gesture of appreciation, and this can bring in referrals for the firm (Singh, 2006).

- Follow up with the customer: Loyal customers want to feel like they are cared for and that the firm has their interests at heart. So send out personalised mailings, invite them to special in-store events as VIP shoppers and enquire about the family or events in their life. Consumers appreciate that someone is thinking about them (Baldwin, 2007; Lake, 2010; Singh, 2006).

Eisingerich & Bell (2006) undertook a study looking at ways to improve customer loyalty within the financial services industry. They have affirmed that communication and mutual learning leads to a high degree of customisation of firms’ offerings, which in turn leads to greater customer loyalty and profitable relationships over time. They believe that encouraging customers to be co-producers acts as a means of delivering superior quality and increasing productivity, provided that the customer has superior knowledge to make a meaningful contribution. They sought to understand the role of client education initiatives in facilitating effective participation in the service process and its effects on loyalty. Their study proved that there is a positive relationship between customer participation and loyalty. In addition, they found that problem management and customer education exert a significant direct influence on customer loyalty within the financial service industry. Eisingerich & Bell’s (2006) study shows that customer participation has a positive impact on customer
loyalty. Clients participate and become involved in the service process and share the credit or blame for outcomes. Due to the high complexity of financial services, clients tend to be critical of the speed and flexibility with which advisors address their concerns. Education though emerged as a powerful determinant of customer participation. Educated customers are confident in making suggestions and, thus, contributing to service delivery is easier; hence, education has the greatest total effect on customer loyalty within this industry. These two researchers also suggest that through training and reconfiguration of rewards, financial service firms can establish a culture among client’s advisors that both client education and participation are expected and desirable.

3.8 Conclusion
This chapter undertook an assessment of the importance of finding the correct fit between the organisation and the front line employee. It is important to always ensure that the most suitably qualified employees are placed in this position as they ultimately liaise with customers and represent the firm when dealing with customers. The importance of proper skills and training was also seen as a good mechanism for improving service delivery to the customer.

The importance of the actual customer service encounter between the firm and the customer was then explored. The importance of customer service delivery was highlighted as well as the need for service excellence in order to foster a longer lasting relationship between the firm and the customer. Equally important is a review of service encounters and service recovery strategies that organisations can implement in the event of a service delivery failure occurring. This is imperative because although no firm aims to achieve failure in the delivery of services, in reality failures can occur and firms must be proactive and have adequate recovery strategies in place.

The chapter closes by exploring ways in which to build customer loyalty for future business endeavours. Loyal customers are needed to sustain growth, success and profitability of any business enterprise. Maintaining customer loyalty is also more affordable for a business than finding new customers; hence, its importance.
The next chapter looks at the importance of technology in improving the level of service delivery offered to customers. The rapid rate of technological advancement constantly places pressure on organisations to revisit their service strategies. Furthermore, an assessment of infrastructure in terms of sick building syndrome will be examined to understand its role, importance and impact on the workplace.
CHAPTER FOUR

The Importance of Technology and Infrastructure

4.1 Introduction

These days the Internet has become a place of shopping and searching as millions of people access the Web (Timm, 2008). The Internet is a marketing tool which offers new and better ways of communicating with people and businesses that will purchase what is being sold (Burke, 2001; Ruyter, Wetzels & Kleijnen, 2000). Unlike other forms of media, the Internet is interactive and this kind of interaction is an essential part of relationship marketing. Within a service context the introduction of technology often empowers the customer to perform the service without being assisted. These advances in communications and information technology are having profound effects on the way that consumers interface with service providers (Fitzsimmons & Fitzsimmons, 2006).

Without technology the idea of globalization would not be possible. If your company has a website, this places the firm in a position to reach millions of customers who may be thousands of miles away simply by the click of a button (Cortwell, 2009). Internet based applications can greatly enhance a firm’s competitiveness (Messmer, 1999). In this chapter, the impact of technology which is always advancing will be analysed to ascertain how it could impact on a customer’s service experience within the organisation. In addition, a discussion on infrastructure will also be undertaken, to explore the effects that Sick Building Syndrome (SBS) could pose on performing one’s duties. Sick Building Syndrome is defined as a combination of ailments (a syndrome) that is associated with an individual’s place of work.

4.2 Technology in Services

Advances in communications and information technology are having a profound effect on the way that consumers are interfacing with service providers (Cortwell, 2009; Fitzsimmons & Fitzsimmons, 2006; Messmer, 1999; Metters, Metters & Walton, 2006; Ruyter et al., 2000). Firms wishing to integrate an Internet presence must perform customer service functions through multiple channels such as in-person, traditional mail, phone, web sites, online chat and e-mail.
Fitzsimmons & Fitzsimmons (2006) identify five modes of technology’s contribution to the service encounter:

- **Mode A** is a technology free service encounter where the customer is in physical proximity to, and interacts with, the human service provider, for example, a hairdresser or a chiropractor.

- **Mode B** is a technology assisted service encounter because only the service provider has access to the technology to improve the quality of face-to-face service. For example, a visit to an optometrist.

- **Mode C** is a technology facilitated service encounter because both the customer and the service provider have access to the same technology. For example, a financial consultant in consultation with a client can refer the client to a model on computer to illustrate projected returns.

- **Mode D** is the technology mediated service encounter because the customer and the service provider are not physically together and, thus, the communication is no longer a traditional face-to-face encounter. Communication is usually enabled through a telephone call to access services such as calling for technical help from a distant call centre.

- **Mode E** is the technology generated service encounter because the human service provider is replaced entirely with technology that allows the customer to self serve. This mode is becoming common as firms attempt to reduce the cost of providing a service.

Figure 4.1 illustrates the various roles of technology in the service encounter as discussed above.
4.3 The Emergence of Self-Service

There are many opportunities for self-service suggesting that provider motivation and customer benefits can grow this mode of business (Hsieh, 2005). Customers will be more accepting of this mode as a result of increased opportunity for customization, accuracy, convenience and speed. According to Fitzsimmons & Fitzsimmons (2006), due to the increase in the cost of human labour, inroads have been created for self-service technology (SST). The emergence of this technology will see an end to low wage, unskilled, non-value-added service jobs. The firm has the advantage of serving more customers with fewer resources; thus, reducing costs while the customer has the ability to customise a product or service for personal use at a time convenient for the customer (Borck, 2004; Hsieh, 2005; Malgeri, 2007; Ruyter et al., 2000).
Hsieh (2005) identified three primary goals that firms may strive towards by entering the self-service arena. They firstly strive to enhance the customer’s service by assisting customers with queries without tying up the firm’s human resources. Indeed if this is executed correctly it has the potential to save the firm money (Malgeri, 2007). Secondly, the firm can enable direct transactions such as, customer orders and exchanges without any direct interaction with an employee. Finally, through online educational guidance customers can train themselves to use the site.

Hsieh (2005) identified the following factors that can affect the adoption and use of self-service technology:

- Quality of products
- Services offered by the firm
- Cost of the product
- Presentation of services
- Design of self-service technology
- The self-service technology’s ability for service recovery
- Promotion of self-service technology
- The way the firm manages and prevents self-service technology failure
- Alternative uses for the same service (competitors)
- The firm’s ability to keep the self-service technology updated and to improve it continuously.

Girman, Keusch & Kmec (2009) undertook a study on the use of vending machines within a University campus environment, and attempted to track the amount of faults that were experienced by the users of these machines. They found that although no official complaints were lodged with the service provider, regular inspections carried out by maintenance crew detected faults with some of the machines. They also investigated the use of pay phones that worked with coins and prepaid cards and again discovered that these phones did have defects present, although no official complaints were received. Girman, Keusch & Kmec (2009) highlighted the importance of periodic checks as long as complaint rates were low, in
order to maintain a level of service quality when firms embrace self-service technology. The service provider must conduct these checks because minor failures may not always be reported but can dissuade first-time users from using self-service technology in the future.

### 4.4 Internet Services

E-business came about as a result of a convergence of several technologies. A website can serve different purposes for different businesses. According to Metters *et al.* (2006), reports indicate a decline in customer satisfaction with most services. Customers grow irate with automated phone systems and a host of new terminology encountered during internet encounters. As a result, many customers encounter long waiting times with e-mail queries and misunderstandings arise as a result of e-mails. Metters *et al.* (2006) propose that a service company must question the importance of their Internet presence by asking the following questions:

- Will customers buy anything or get all the information they need on the site?
- Will customers return?
- Will customers understand the business concept?
- Will the business be able to handle inbound and outbound call volumes?
- Will customers prefer self service or human contact?
- Will the Internet customer service be in-house or provided by a third party?
- What are the metrics and goals for customer service?

To address these questions one must look at the fundamentals of Internet service design. When customers interact with Internet services their communication is task-specific (Clegg, 2010). The task could relate to an enquiry, purchase intent or a complaint. Customers prefer speed and accuracy in any service encounter. Depending on the nature of their task some may have no problems using an automated system but others may require some degree of human contact. When dealing with customer complaints, Metters *et al.* (2006) find that the customer may e-mail their complaint to the company; however, the e-mail offers the least effective vehicle for customer complaint resolution due to miscommunication and long time lags (Timm, 2008). The best way to handle complaints is through real time interaction with a skilled agent. The customer must always be given the option of contacting the company
instead of forcing them to self serve. Many firms have, thus, turned their attention to Customer Call centres, a place where a customer can access a person via a variety of means. Call centres normally operate twenty four hours a day, seven days a week, thereby creating fewer barriers to communication (Burke, 2001). Traditional call centres employ a large number of agents to handle a few accounts. This saves the firm resources because they are able to forecast how many agents are needed based on a labour-scheduling model. These models assume that all employees perform the same tasks, on average spend a specified amount of time per call. It also assumes that employees focus on one customer at a time and that customers are responded to in real time. Since this concept of doing business is relatively new, only informal rules of thumb guide these operational strategies.

According to Timm (2008), more than two thirds of customers stop doing business with a company because of poor access to services and information. He suggests that in order to facilitate communication, firms can develop a database containing frequently asked questions (FAQs) to assist customers online. FAQs are efficient and effective but the problem encountered by customers is that they have to read through a few hundred questions before encountering a question that will assist them in their query so yet again this is not entirely efficient for a self serve customer. Sophisticated web sites can do multiple word searches to try and enhance the experience for the customer. A new variation to chat rooms and the internet are blogs. A blog is simply a journal maintained by a firm or an individual. Bloggers are very influential in shaping a firms image. Blogs also assist in sharing information between the firm and the customer or between fellow customers (Clegg, 2010; Schiffman & Kanuk, 2004).

Clegg (2010) supports the idea of a firm setting up a blog as it connects the firm to customers instantly. She suggests that a firm can maximise their reach by setting up blogs via social media sites such as Twitter, Facebook and LinkedIn.

Clegg (2010) looked at the role of the Internet within an insurance organisation. She found that insurers are looking for ways to drive improvements within the firm such as through claims intake via the web, claims data download, faster turnaround for claims and real-time updates. Forward thinking carriers are benefitting from claims efficiencies by focusing on
collaboration, cost saving, cutting-edge technology and clarity in the claims lifecycle. Agencies, on the other hand, are focusing on customer service (satisfaction), cost of doing business, company reputation for innovation and claims agility. Clegg (2010) further supported the use of the Internet in speeding up the claims process. Fichter & Wisniewski (2010) offer advice in terms of website design. They suggest that good accessible content is critical for every website. Firms should avoid long sentences and paragraphs and break up information for consumers to comprehend. The personality of the website is also important, in that the interaction between the firm and customers should be friendly and personal. They further suggest that user-testing is very important. Firms must monitor the top five or ten areas that are frequently visited and refine and improve on them so as to make the system more user-friendly. Site navigation should also be quick and easy.

4.5 Disadvantages of Web-Based E-service

E-service alone is not a hundred percent sure-fire strategy for handling queries. It can be seen as a cost effective measure as it enables self-service, Web, blogs, e-mail and live chat but e-service is not a substitute for old fashioned phone calls and direct human contact (Keaggy & Hurst, 2002; Schiffman & Kanuk, 2004; Timm, 2008). It is important to understand that the Internet is a moving target, with a hardware life cycle of about five years and software life cycles of even shorter times, with updates occurring frequently; hence, staying updated is expensive. Many firms have rushed to migrate customer service to the Web and have in the process encountered service failures. Ignoring the human side of customer service can turn what looks like a low cost service alternative into a costly mistake. Technology also poses the challenge for the firm to have a well-maintained, state-of-the-art equipment and qualified and competent people to operate it, leading to constant training of staff (Lucas, 2005). Many firms also see technology as a way of reducing staff costs and, therefore, cut back on jobs. As pointed out earlier the rate of technological advancement is always changing thereby placing extra stress on firms and staff to keep up with these changes. Constant training and the increased demand to perform leads to extreme levels of stress and is a contributing factor to the high turnover rate of call centre staff and for customer defection (Lucas, 2005; Reichheld & Sasser, 1990). In addition, due to customer fears of fraud and violation of privacy, consumers are reluctant to disclose information like identity numbers, and credit card account information, addresses and
personal data online, which contributes to their paranoia and hinders online communication (Schiffman & Kanuk, 2004). They usually prefer to speak to an agent (Lucas, 2005). Two researchers Keaggy & Hurst (2002) engaged in a face-off about whether the use of weblogs was considered as a legitimate business tool. Keaggy proposes that it is effective as it increases employee communication, knowledge, saves time and resources and builds the firm’s reputation and confidence. Keaggy also found that consumers often complain about receiving too many e-mails but with the use of blogs no messages get deleted. Hurst found that although blogs are popular they are not of much value to the firm as there a millions of blogs that contain postings by random authors. He argues that the information contained in these blogs only holds value if the customer takes the time to read it. He supports the use of e-mailed newsletters to customers as a more effective tool. Perez (2004) investigated Dell Incorporated’s drive to open IT support hubs worldwide in order to improve service delivery to buyers. Dell has implemented an Enterprise Command Centre (ECC) worldwide that will be staffed around the clock and will act as central repositories of service events in each geographic area.

Timm (2008) believes that by following a few simple action tips a firm can improve their service on the Web:

**Action 1: Be there and be quick**
Ensure that your site is up and running and that the website opens quickly and easily for the customer. Maintain the website and avoid a situation where when a customer tries to access the site, it is down. Ensure that when customers hit your company Web page that it is up and running (Clegg, 2010; Fichter & Wisniewski, 2010)).

**Action 2: Make site navigation simple**
Web customer service should be one click away. Once customers log onto a home page they should be able to get assistance immediately. Ensure that site navigation is quick, simple and obvious. Customers should always have ways to get back to a specific page to enhance their experience and not wonder around in a counterproductive maze (Fichter & Wisniewski, 2010).
**Action 3: Respond quickly**
Response times are expected to be immediate. Waiting more than three seconds for a computer screen to refresh is unacceptable (Perez, 2004). Even more important is the quick turnaround time for customer enquiries. E-mails should have a response time of twenty four hours or less and web chat should have the pace of live conversation (Lu & Zhang, 2003).

**Action 4: Provide communication alternatives**
The more high-tech the world becomes, the more some people crave high touch service or non-electronic contact of some sort. At some point customers can become frustrated with self-serve options and may seek human contact. The solution may be to provide communication alternatives like e-mail, web chat, two-way interactive video or even telephone services (Keaggy & Hurst, 2002).

**Action 5: Pay attention to form and function**
Customer care sites must be functional and visually pleasing, but not too over the top. Graphic designers, usability engineers, database administrators, content experts and programmers are all critical role players. The most customer-friendly sites avoid unnecessary clutter, and instead maintain a simple, functional site (Fichter & Wisniewski, 2010; Lu & Zhang, 2003; Timm, 2008).

**4.6 Tips to Evaluate and Grow E-Service Effectiveness**
According to Timm (2008), there are five more useful tips to grow your e-service and make it a good experience for customers to enjoy:

- Track customer traffic: By monitoring the click path of the customer the firm can track the service resolution and abandonment rates, average time to connect to the site and frequent requests. This information will enable firms to improve their service offering to the customer. In a study of the different software programs available Borck (2004) found that these programs must have customer-chat amenities such as colour coded text and canned dialogues to speed up responses to FAQs. In addition, online queue information that can be sent to customers desktops to inform them of where they are in the queue should also be implemented.
Benchmark service levels: Firms with good customer care sites benchmark and compare themselves against competitors. Benchmarking requires keeping careful statistics on existing service levels which can be used to set future targets. Typical services monitored include, average time to respond to e-mails, average time to respond to page requests, site uptime, average time to respond to web chat enquiries and the number of resolved and unresolved enquiries per day.

Teach your site to learn: Make sure to update information on a regular basis. Check to see what does not work or what is missing, what click paths end in dissatisfied customers and what new questions your customers are asking. An adaptive, dynamic site lets customers know that the firm is listening and responding to their needs.

Build on-going e-relationships: Successful human relationships are two sided. Sometimes people initiate communication that builds the relationship, sometimes they reciprocate to others. Firms can offer e-mail notifications to customers about changes in products, catalogues or content provided that they have information to do so first from the customer. Firms must avoid spamming at all costs as this can damage a relationship (Fichter & Wisniewski, 2010).

End high for better loyalty: This last tip is designed to leave the customer on a high note, thinking positively about the company. Before a customer logs off from a website, the firm should always thank the customer for the visit. To rebuild goodwill offer a peace token such as a discount on the next visit, or additional service coverage of some sort (Rowley, 2006).

4.7 Types of Technology
Previously when customers had a query they would call the call centre. Once the agents obtained a host of information then only were they in a position to handle queries. Today though, technology has expedited the process and some of the typical systems found in call centres include (Lucas, 2005):
Automatic call distribution (ACD) systems: This routes incoming calls to the next available agent when lines are busy. A recording may also cue one to select a series of numbers on the phone to get to certain people or information.

Automatic number identification (ANI): It is a form of caller ID which allows customers to be identified before speaking to an agent. This saves time for the agent as the customers telephone number does not have to be recorded and their geographic location is revealed via information available on a computer screen. Calls can also be routed to the same agent who most recently handled a specific caller.

Electronic mail (e-mail): It is an inexpensive rapid way of communicating with customers in writing. It allows customers to access information via telephone and then through prompting via a telephone keypad has information delivered via e-mail.

Facsimile machine (fax): Allows graphics and text messages to be transported as electronic signals via telephone or a PC equipped with a modem. Customers can receive information without ever speaking to a person by simply keying in a code.

Internet call back: Allows a customer browsing the internet to click on words like “call me” enter their phone number and continue browsing. This triggers predictive dialling system and assigns an agent to handle the call when it rings at the customer’s end.

Internet telephony: Allows users to have voice communications over the internet. However, internet telephony is in its infancy and lacks standards, and is not embraced by consumers.

Interactive voice recognition (IVR): Allows customers to call in 24 hours a day, 7 days a week even if agents are not available. By keying in a series of numbers they are still able to access information or get answers to questions. Such systems also ensure consistency of information.

Media blending: Allows agents to communicate with a customer over a telephone line at the same time information is displayed over the internet to the customer. This type of technology though has not taken off to its full potential.

Online information fulfilment system: Allows customers to go to the World Wide Web, access the firm’s website and click on the desired information. This is one of the fastest growing customer service technologies.
Predictive dialling system: Automatically places outgoing calls and delivers incoming calls to the next available agent.

Screen pop-ups: Are used in conjunction with ANI and IVR to identify callers. As a call is dispatched to the agent, the system provides information about the caller that pops onto the agents screen before they answer the call.

Video: For call centres and customers with video camera computer hook-ups, agents and clients can see one another during interactions.

Voice recognition: It is a newcomer to the market but is advancing. This system is incorporated into the centre’s voice response system. It’s used by individuals who dictate data directly into the computer, which converts the spoken words into text. Customers though would first need to create passwords to verify identification and access their accounts. People with disabilities can also obtain data by speaking into the computer.

These are some of the most widely available types of technology being employed within a call centre today. Many of these systems are simple to use and easy to understand making the service encounter a success and the technology adopted as user-friendly as possible to both front line staff and customers alike. Ruyter et al., (2000) discovered, through their studies, that organisational reputation leads to quicker adoption of e-services by customers.

The firm’s reputation also impacted on customer’s perceived risk associated with engaging in e-services. If firms were trustworthy and had good reputations then customers believe that the firm will do its best to reduce risks encountered through e-services.

The focus now shifts to the concept of sick building syndrome (SBS) in an attempt to understand what this phenomenon encompasses, some of the components associated with SBS as well as the impact that SBS can have on the workplace, staff and productivity levels.

4.8 What is Sick Building Syndrome (SBS)?

The term sick building syndrome (SBS) is applied to conditions in which a combination of factors such as chemicals, smoke, fumes and other components of building materials lead to poor indoor quality air, which further leads to various health complaints from workers (Arnold, 2001; Boykins & Sauer, 1996; Ilozor, Treloar, Olomolaiye & Okoroh, 2001). The
term SBS arose as a result of the increasing presence of electronic equipment and other factors. It was used to describe the symptoms experienced by many people occupying a similar building that are associated with their presence in that building (The Environmental Illness Resource, 2010).

The Environmental Illness Resource (2010) reported that the US Environmental Protection Agency (EPA) found that SBS is strongly suspected when the following are present:

✓ Symptoms are temporally related to time spent in a particular building.

✓ Symptoms resolve when the individual is not in the building.

✓ Symptoms recur seasonally (heating, cooling).

✓ Co-workers, peers have noted similar complaints.

Ilozor et al., (2001) also noticed through their research that while this situation is present in many offices its impact was most notable in open-plan types of office space. It is therefore logical to expect that most complaints will be received from open plan offices wherein the greatest numbers of employees are likely to be working. The prevalence of harmful material and artificial substances indoors, combined with poor ventilation and long periods of time spent by staff indoors can lead to various health problems (Arnold, 2001; Boykins & Sauer, 1996). In an effort to reduce energy costs, the design and construction of completely sealed energy-efficient commercial building shells have evolved (Ilozor et al., 2001; National Safety Council, 2010). Volatile organic compounds (VOCs) are a major concern for indoor air pollution because of the impact on human health (Arnold, 2001; Boykins & Sauer, 1996; National Safety Council, 2010; Yao, Zhang, Hand & Perram, 2009). VOCs can be found on computer desks and shelving, in carpets, on paints and varnishes, marker pens, printer ink and in offices that are full of computers (Brown, 2004; Elsberry, 2007; The Environmental Illness Resource, 2010).

According to studies by Yao et al., (2009), indoor VOCs were much higher than outdoor air measurements; hence, it has become a matter of public concern in the USA. The chronic effects of VOC exposure can include damage to the kidneys, liver, central nervous system and some forms of cancer.
4.9 Causes of Sick Building Syndrome (SBS)

Volatile organic and synthetic compounds, bacteria, fungi, moulds and viruses are readily found in emissions from office equipment, building materials, dust, cigarettes and office supplies such as solvents, glue and cleaning agents used for interior workplaces (Aerias Air Quality Sciences 2010; Arnold, 2001; Boykins & Sauer, 1996; Elsberry, 2007; Pitt, 2008). These volatile substances are associated with indoor pollution (Ilozor et al., 2001). Other sources of SBS include large office spaces that are air-conditioned but installations rarely work well. This may cause the environment to become either too hot or too cold, there is a draught or the air is too dry. Another problem is that artificial light has to be used continuously which is regarded as unhealthy because people find it too bright and glaring and often complain about headache and eye strain (Edwards & Edwards, 1991). There is also lower quality air and related illness. Moisture that arises from damp building structures is another type of pollutant. Poor sanitary and cleaning practices also contribute to a building becoming contaminated; if for instance, the bathroom is not disinfected germs can spread to other parts of the building. Aerias Air Quality Sciences (2010), Boykins & Sauer (1996), Ilozor et al. (2001), Pitt (2008), The National Safety Council (2010) and the Environmental Illness Resource (2010) compiled a list of common symptoms of SBS which include:

- tired or strained eyes
- unusual tiredness
- fatigue or drowsiness
- headaches
- tension
- irritability
- nervousness
- sinus congestion
- sore throats
- chest tightness and wheezing
- skin dryness
Gastrointestinal complaints.

Ilozor et al., (2001) found that, in addition to the presence of harmful chemicals noise is another source of complaints about interruptions and health problems. Besides affecting people’s morale, employee health and safety are jeopardised by noise and crowding in open-plan offices (Brown, 2004). Office noise is heightened through conversations, equipment, radios and outdoor noise (Fernberg, 1989). Ilozor et al., (2001) suggest that in order to provide basic employee comfort, management must answer the following questions:

- Is the work area too hot or cold?
- Does the temperature adversely affect job performance and behaviour?
- Is noise a factor?
- Does noise affect communication or cause confusion?
- Is light sufficient?
- Is secondary lighting needed in order to satisfactorily perform work?
- Is air movement or exchange sufficient?
- Is an adequate volume of outside make-up air provided?
- Is humidity controlled?
- Is work flow coordinated, or does it cause frustration?
- Is the work area congested?
- Do physical obstacles hinder job performance?

In open-plan offices there is a greater need for services to temper and cool the air and to artificially light spaces away from windows. If these services are not managed properly then they become unpleasant for the workers. Poor office design and ergonomics is also a leading contributor of health problems. Management plays a key role in addressing these questions and this leads to the strong need for effective space management measures. It must be noted that in many instances SBS precedes management’s control especially when buildings are rented or leased and not built by a firm. Stress is another important consideration in an office.
building as work pressures to meet deadlines takes its toll on workers contributing to high levels of absenteeism, psychological distress and physical ailments (The Environmental Illness Resource, 2010).

All Business Consulting (2010) conducted research into the impact of office design on business performance. The first point raised was that of staff satisfaction and performance. In striving for satisfaction firms must adhere to workers’ health and comfort through rapid responses to reported problems. They reported that productivity differences between comfortable and uncomfortable staff are as high as twenty five percent so controlling variables such as air quality, lighting, temperature and noise can increase productivity. And finally, the second point raised was the role of spatial arrangement. There must be a balance between private offices and open plans which ultimately affect issues such as privacy, concentration levels, communication and interaction. Naturally quiet spaces are needed for those engaging in critical thinking that requires immense concentration. Productivity levels were also much higher when people worked in isolation as opposed to within an open plan office setup (All Business Consulting, 2010).

4.10 Solutions to overcoming Sick Building Syndrome

According to the National Safety Council (2010) and NHS Choices (2010), if SBS arises within the workplace then staff must bring this to the attention of the Human Resources representative or the local health and safety representative. Employers have an obligation to investigate the problem further. In addition the following are recommended:

- Employers can also carry out staff surveys to test if symptoms are present in most staff (Matthes, 1992).
- Check the general cleanliness of the building and ensure that vacuum cleaners are working properly (Fernberg, 1989).
- Check that cleaning materials are properly stored and used (Matthes, 1992).
- Check the general operation of heating, ventilation and air-conditioning systems. Special attention should be paid to fresh air supply.
- Check the condition and cleanliness of air filters, humidifiers, de-humidifiers and cooling towers.
Check the heating, ventilation and air-conditioning system maintenance schedules to ensure that schedules are being adhered to.

Indoor plants play a key role in reducing offensive odours in the workplace, particularly ammonia; it is therefore highly recommended (Edwards & Edwards, 1991; Matthes, 1992; Pitt, 2008).

Installation of high-volume low-speed fans in the workplace is cost efficient and helps circulate large volumes of air reducing air pollution and increasing employee alertness (Edwards & Edwards, 1991; Witt, 2004).

Create a separate smoking area to control air pollution (Fernberg, 1989; Matthes, 1992).

Employers should also offer appropriate equipment and furniture to staff such as adjustable chairs and detachable keyboards. Employers should also offer ergonomics training and exercise programs, allow for job rotation and provide rest breaks. In addition, it should be noted that employees come in all shapes and sizes, so it is important to provide flexible equipment and to customize workstations to suit individual dimensions and preferences (Edwards & Edwards, 1991; Matthes, 1992).

Additional studies undertaken by Brown (2004) and Williams (2000) proposed the use of high intensity ultraviolet germicidal irradiation (UVGI) to improve air quality for tenants. This UVGI light has been a key to preventing the occurrence of SBS as its shine is so intense that it can penetrate cell membranes of microorganisms, breaking their DNA structure and inhibiting its reproduction. This high intensity UVGI can improve air quality by preventing mould, bacteria and moisture in common places such as air-conditioning coils and drip pans.

Williams (2000) cited the findings of a study published in the Lancet medical journal conducted by scientists at McGill University. These scientists found that through shining high intensity UVGI purifiers on the air-conditioning coil overall sickness rates fell by twenty percent, a further forty percent reduction in respiratory symptoms was also recorded and overall, a ninety nine percent reduction in microbial concentrations was achieved.

Aston (2007) shared some healthy tips for improving the work environment. He suggested:
✓ Lighting: Compared with natural light, fluorescent tubes drain productivity. He suggests that this can be rectified by implementing skylights and the use of mirrors to track the sun and deliver more rays. By pairing these with sensors that dim overhead fixtures, electricity bills can be reduced by seventy five percent.

✓ Cleaning agents: A building can release tons of toxic chemicals from cleansers into the workplace. To remedy this firms are rolling out new lines of plant-based cleaners for carpets, glass and other surfaces.

✓ Carpets and fabrics: Rugs and carpets harbour mould and fungi and glues that anchor them to the floor emit fumes. This can be remedied by replacing the glue used through switching to hand-sized square carpets that connect carpet tiles to one another but not directly to the floor; thereby, reducing emissions.

✓ Furniture: Formaldehyde is found in processed woods used in most types of office furniture. Firms can seek to use furniture that is made from sunflower husks, wheat straw and non toxic wood products.

✓ Electronics: Some laser printers and copiers emit ozone VOCs and ultrafine toner specks that can damage lung tissue. This can be remedied by moving office equipment into well-ventilated areas away from desks (Edwards & Edwards, 1991; Fernberg, 1989; Matthes, 1992).

4.11 Conclusion

The chapter initially focused on the role of technology within a service context. Technology is extremely critical in the execution of high quality, expedient service delivery to customers today. The five common modes of technology within a service encounter were highlighted and the emergence of self service was also explored as a competitive and cost effective tool of service delivery. The magnanimous effects of the internet on service delivery were also discussed together with the shortfalls associated with E-service encounters. Since E-service is growing and is likely to continue to grow in the foreseeable future, it was necessary to look at strategies that firms could consider in trying to develop and harness this type of service encounter.
The focus then shifted to Sick Building Syndrome (SBS). An assessment of this phenomenon was undertaken together with some of the possible causes that could contribute to this condition arising in the workplace. The chapter closed by exploring some of the suggested solutions of overcoming SBS in the event of its emergence within the work environment.

Much of the technology discussed in this chapter has a direct impact on the operational aspects of a call centre environment. In many instances customers are given the option of self-service or access to an agent via a variety of means. The advantages and disadvantages of E-service, in particular will have many operational implications within the context of this environment. Additionally the causes, symptoms and effects of SBS will also affect the productivity levels of a call centre largely because many call centres are operated on an open-plan basis. Employers thus need to monitor the causes of SBS such as noise, artificial lighting and emissions from office equipment in order to protect the health and well-being of workers. In concluding the overall literature analysis it is important to note that although the literature review deals with firms and organisations in the private sector the research deals with a public sector service organisation operating under monopolistic conditions.

The next chapter examines the research methodology that will be engaged for the collection of empirical data relevant to validate this study.
CHAPTER FIVE
Research Methodology

5.1 Introduction
Sekaran and Bougie (2010) define research as a process of seeking solutions to a problem after a thorough study and analysis of the situational factors. Business research can be described as a systematic and organised effort to investigate a specific problem encountered within the work setting which requires a solution. It comprises of a series of steps that are designed and executed with the goal of finding answers to the issues that are of concern to the manager in the work environment. Over the past decade numerous cultural, technological and competitive factors have created new challenges and problems for today’s decision makers in business (Hair, Bush, Ortinau, 2000). The marketing research concept requires that customer satisfaction rather than profit maximisation is the goal of an organisation. This means that organisations should try to obtain information on consumer needs and gather marketing intelligence to help satisfy these needs efficiently. Marketing research is therefore critical as it helps to improve management decision-making by providing relevant, accurate and timely information (Aaker, Kumar & Day, 1995). This research aims to measure how customer satisfaction can be maximized in interactions between the firm and its customers via the call centre.

The chapter will discuss sampling techniques being used for the purpose of the study together with the data collection methods being adopted for the study. A detailed account of the data analysis will also be undertaken giving attention to the nature of both descriptive and inferential statistics. Statistical analysis of the questionnaire will also be discussed as a questionnaire is the data collection tool being utilised for the purpose of the study. It is important to note that two separate questionnaires will be administered to inbound call centre agents employed within this public service institution and customers with access to emails that have used the call centre in the recent past.
5.2 Problem Statement
To what extent is the call centre an effective mechanism for managing customers and their needs?

5.3 Objectives of the study
1. To conduct a literature review on the key dimensions of the study relating to the service environment of the organisation, service excellence and the importance of technology and infrastructure whilst taking cognisance of and managing customers and their needs.
2. To assess the current nature of the service environment within the call centre.
3. To examine and evaluate if there is a significant difference in the perceptions of call centre agents and customers regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) respectively.
4. To examine the perceptions of call centre agents and customers varying in biographical profiles (gender, age, race, tenure, educational qualifications, employment status) regarding the dimensions that influence the effectiveness of service delivery in the call centre (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service).
5. To examine the perceptions of call centre agents varying in operational measures (number of calls taken per day, average call waiting time, call abandonment rates, call talk time, call wrap-up time, time taken in queue before call is answered) regarding the dimensions that influence the effectiveness of service delivery in the call centre.
6. To examine the perceptions of customers regarding the dimensions that influence the effectiveness of service delivery in the call centre based on varying operational measures.
7. To assess the extent do the dimensions of the study (Human resources, technology, infrastructure/sick building syndrome, customer perceptions/service) influence call centre effectiveness.
5.4 Sampling Techniques and Description of the Sample

Surveys are useful in seeking answers to research questions through data collection and subsequent analysis, but it can do harm if the population is not correctly targeted. If data is not collected from people, events or objects that provide the correct answers to solve the problem, the survey will be in vain. This brings us to the concept of sampling, which entails selecting the right individuals, objects or events as representatives from the entire population (Sekaran & Bougie, 2010). Sampling may be useful if the population size is large and if both the cost and time associated with obtaining information from the population is high. Furthermore the opportunity to make a quick decision may be lost if a large population must be surveyed (Aaker et al., 1995).

The population refers to the entire group of people, events or things of interest that the researcher wishes to investigate. It is a group of people, events or things of interest for which the researcher wants to make inferences (based on sample statistics) (Sekaran & Bougie, 2010). Additionally an element is a single member of the population (Sekaran, 2003; Sekaran & Bougie, 2010).

A sample is a subset of the population comprising of some members selected from it. In other words, some but not all elements of the population would form a sample (Sekaran, 2003). According to Bradley (2007:163), sampling can be defined as “a relatively small part of the whole, which can tell us about that whole”. The ultimate test of a sampling design is how well it represents the characteristics it purports to represent (Cooper & Schindler, 2008). A subject is a single member of the sample, just as an element is a single member of the population (Sekaran, 2003).

In this study, the sample of consumers will be drawn from a listing of all elements in the population. Likewise, the sample for call centre agents will also be drawn from a listing of all elements in the population.

There are two major types of sampling design: probability and non-probability sampling. In probability sampling, the elements in the population have some known chance or probability
of being selected as sample subjects. In non-probability sampling, the elements do not have a known or predetermined chance of being selected as subjects (Aaker et al., 1995; Sekaran, 2003).

Probability sampling designs are used when the representativeness of the sample is important in the interest of wider generalizability. This study will hence use a probability sampling design (Bradley, 2007).

Probability sampling can be either unrestricted (simple random sampling) or restricted (complex probability sampling) in nature (Cooper & Schindler, 2008; Hair et al., 2000). For the purpose of this study, two separate probability sampling techniques will be used to administer questionnaires to consumers who use the call centre and to call centre agents employed within the call centre of the organization, namely, simple random sampling and cluster sampling.

The unrestricted simple random sample is the purest form of probability sampling. Since all probability samples must provide a non-zero probability of selection for each population element, this method is considered a special case in which each element of the population has a known and equal chance of being selected (Cooper & Schindler, 2008; Sekaran & Bougie, 2010). Simple random sampling has the least bias and offers the most generalizability; however, it could become cumbersome and expensive and requires an entirely updated listing of the population to always be available (Sekaran, 2003; Wiid & Diggines, 2009).

For this study, a simple random sampling process will be adopted to administer questionnaires to consumers. The population for consumers will comprise of all consumers having access to e-mail facilities and that have used the call centre in Durban. The sample will be drawn by making reference to a simplified population-to-sample size table used for determining an adequate sample for a given population size (Sekaran, 2003). A total of all consumers who subscribe to e-billing in Durban will be pooled together and a corresponding sample will be drawn.
In addition, cluster sampling will be used to draw a sample of call centre agents employed within the four call centers in the Durban area.

According to Sekaran (2003), groups or chunks of elements that have heterogeneity among members within each group are chosen for study in cluster sampling. When several groups with intragroup heterogeneity and intergroup homogeneity are found then a random sampling of clusters or groups can ideally be done and information gathered from each of the members in the randomly chosen clusters (Hair et al., 2000; Sekaran & Bougie, 2010).

The unit cost of cluster sampling is much lower; however, cluster sampling is exposed to a greater degree of bias and is the least generalizable of all the probability sampling designs, because most naturally occurring clusters in the organisational context do not contain heterogeneous elements (Blumberg, Cooper & Schindler, 2005).

According to Cooper & Schindler (2008), two conditions foster the use of cluster sampling:
1. The need for more economic efficiency that can be provided by simple random sampling and
2. The frequent unavailability of a practical sampling frame for individual elements.

Although statistical efficiency in cluster sampling is low, economic efficiency is often great enough to overcome this weakness.

For the purpose of this study, cluster sampling will be utilised by selecting all inbound call centre agents employed within the call centre of the organisation. These agents will be employed at either of the four call centres in Durban. The population will comprise of a combined total of all inbound call centre agents across the four call centres and the appropriate minimum corresponding sample size will be determined using Sekaran’s (2003) population-to-sample size table.

Table 5.1 indicates the sample size for a given population size that was used for this study.
Table 5.1
Sample Size for a Given Population Size

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5.5 Data Collection

Once the data requirements of the research have been defined, an appropriate data collection method must be chosen. According to Wegner (2000), the choice of a primary data collection method influences:
The quality, quantity and type of data that can be gathered and
The selection of statistical analyses.

The term primary data is used to describe the information that is collected for a specific purpose. Secondary data is best described as second-hand because the data is old, whereas primary data is collected for a specific reason (Bradley, 2007; Wiid & Diggines, 2009).

Primary data can be collected either through quantitative or qualitative research. Each of these approaches can be further sub-divided into distinctive methods of data collection. Quantitative research techniques include surveys, observation and experiments. Qualitative research techniques include focus groups, in-depth interviews and predictive techniques (Hair et al., 2000; Wiid & Diggines, 2009). This study will utilize quantitative research techniques, where a separate questionnaire will be administered to customers and to call centre agents employed within the call centre of the organisation respectively.

5.5.1 Questionnaires
A questionnaire is a pre-formulated, written set of questions to which respondents record their answers, usually within closely defined alternatives (Sekaran, 2003). Questionnaires are efficient data collection mechanisms when the researcher knows exactly what is required and how to measure the variables of interest (Cooper & Schindler, 2008).

5.5.1.1 Nature and Purpose of the Questionnaire
Questionnaires can either be personally administered, mailed to respondents or electronically distributed. Both the questionnaires in this study will be electronically distributed to customers and the call centre agents respectively. The main advantage of mail questionnaires is that it covers a wider geographical area; the respondents can complete them at their convenience at home; however, the return rates of mail questionnaires are typically low. Sekaran & Bougie (2010) propose that a thirty percent response rate is considered acceptable. To ensure a higher return rate, e-mail rather than postal services will be used as it is more effective and less time consuming for the respondents.
5.5.1.2 Construction of the Questionnaire

According to Sekaran & Bougie (2010), sound questionnaire design principles focus on three areas. The first relates to wording, the second refers to measurement and planning of issues with regard to how variables will be categorized, scaled and coded after the responses are received. The third pertains to the general appearance of the questionnaire.

The nature of the variables tapped, which can be either subjective feelings or objective facts will determine the kind of questions asked (Sekaran & Bougie, 2010; Zikmund, 2003). For the purpose of this study, the variables tapped for call centre agents are subjective in nature (e.g. job satisfaction, remuneration, ease of technology) and the variables tapped for consumers likewise are also subjective in nature (e.g. skills, knowledge, interpersonal skills, satisfaction) since respondents beliefs, perceptions and attitudes are being measured.

Both the questionnaires also measure objective variables in the biographical details section of the respective questionnaires using the nominal scale. All questions have been positively worded in both questionnaires (Sekaran, 2003; Zikmund, 2003). A respondent who is not particularly interested in completing the questionnaire is more likely to stay involved and remain alert while answering positively worded questions (Sekaran & Bougie, 2010; Zikmund, 2003). The five-point Likert scale was used in both questionnaires ranging from 1 (strongly disagree) to 5 (strongly agree).

The language and wording of the questionnaires should approximate the level of understanding of respondents. The choice of words was dependent on respondents’ educational level, usage of terms and idioms in culture and the frames of reference of respondents. The questionnaires are to be completed in English only (Hair et al., 2000; Sekaran & Bougie, 2010).

All questions in both questionnaires utilized closed ended questions where respondents were invited to mark choices among a set of alternatives given by the researcher. Closed ended questions help the respondents to make quick decisions (Hair et al., 2000; Sekaran, 2003; Zikmund, 2003). The questions were kept short as they are preferred to long questions.
(Cooper & Schindler, 2008). The sequence of questions is such that the respondents are lead from questions of a general and operational nature to those of a more specific nature in respect of the call centre agent’s questionnaire. The sections of the call centre agent’s questionnaire (Appendix 1) are as follows:

- Section A deals purely with the biographical and operational data of call centre agents employed within the call centre.
- Section B deals with the Human Resources sub-dimension which taps the perception of staff on variables regarding their knowledge and ability, interpersonal skills, training and development, remuneration, motivation and teamwork.
- Section C pertains to the sub-dimension of Technology and looks at how well agents understand the technology and its ease of use together with whether they prefer personal interaction or self service portals to be utilized in managing consumers.
- Section D relates to the sub-dimension of Infrastructure/Sick Building Syndrome and taps agent’s perceptions of layout of office, ergonomic design of workstations, lighting/ventilation, health/performance and noise on their level of performance within the call centre.
- Section E relates to the sub-dimension of customers and the ease of communication between customers and call centre agents.

The consumer questionnaire also begins with a set of general questions and follows on to a more specific nature and therefore, adopts the funnel approach. The sections of the consumer questionnaire (Appendix 2) are as follows:

- Section A deals with the biographical details of consumers participating in the study.
- Section B contains the sub-dimension of Human Resources and taps consumers’ expectations of agents skills/knowledge, interpersonal skills and training and development.
- Section C explores the sub-dimension of customer service tapping consumers’ expectations of service delivery, service excellence, service retention and loyalty.
- Section D pertains to the sub-dimension of Technology and explores the consumers’ perception of the use of technology in their interaction with the call centre whilst exploring system efficiency, ease of use and systems clarity.
Section E entails the sub-dimension of Infrastructure/Sick Building Syndrome in terms of customer’s perceptions of waiting lines and the attention levels of an agent when on a call with the customer.

The scale used in the construction of the questionnaire was a nominal scale for biographical profiles and an interval scale was adopted for the subsequent sections in both questionnaires.

5.5.1.3 Administration of Call Centre Agents’ Questionnaires

The survey will be confined to the call centre agents employed within the four call centres in Durban. The questionnaire will be personally administered to a sample of call centre agents in Durban. The agents will be required to completely answer Sections A to E of the questionnaire and then physically submit their questionnaires (in a sealed envelope to ensure confidentiality) to their respective team leaders who are designated to receive their responses.

5.5.1.4 Administration of Customers’ Questionnaire

The survey will be electronically mailed to customers who have access to e-billing in Durban. The customers will be required to answer Sections A to E of the questionnaire and then electronically submit their responses to a special e-mail address that has been designed to receive their responses. Online surveys are easily designed and administered when microcomputers are hooked up to computer networks (Sekaran, 2003). This approach was considered suitable as respondents in this study were familiar with the use of a computer and comfortable responding to the questionnaire in this manner. For the purposes of this study QuestionPro will be used to develop the online questionnaire. This software system is specifically designed to make online research simpler to execute. The questionnaire will be typed and loaded onto QuestionPro.com. In addition, a database containing the names of all customers that subscribe to the e-billing system of the organisation used in the study will be uploaded onto the system and the online questionnaire will then be e-mailed to these customers for their participation. Once questionnaires have been completed by participants, they simply have to click on the ‘send’ button and the completed questionnaire will be automatically e-mailed back to the researcher on the stipulated e-mail address.
5.5.1.5 In-house Pretesting and Pilot Testing

It is important to pretest the instrument to ensure that the questions are understood by the respondents, to guard against ambiguity in the questions and to ensure that there are no problems with wording and measurement (Aaker et al., 1995). Both questionnaires have been subjected to in-house pretesting by the researcher’s supervisor who is an expert in questionnaire design and is an Industrial Psychologist experienced in the relevant subject matter. No inadequacies were found. In addition, pilot testing was conducted to identify possible inadequacies before administering the instrument to a large number of respondents and thus reduce bias (Sekaran, 2003). The questionnaire for agents was pilot tested on twenty call centre agents to test the appropriateness of the questions and their understanding. No inadequacies were reported.

Furthermore, a pilot test was conducted on a small number of twenty customers to also test their understanding and the appropriateness of questions asked in the questionnaire designed for customers in order to rectify inadequacies. The feedback from the pilot testing indicated that customers were able to understand and interpret the questions easily hence no inadequacies were reported here either.

5.5.1.6 Validity and Reliability in the Process

When asking a set of questions the researcher hopes that he/she is tapping the concept but how can the researcher be reasonably certain that the correct concepts are being measured and not something else? This can be determined by applying certain validity tests (Sekaran & Bougie, 2010). Validity can be sub-divided into three broad headings namely: content validity, criterion validity and construct validity.

The researcher will use content validity and face validity as a validity measure for this research. Content validity ensures that the measure includes an adequate and representative set of items that tap the concept. The more the scale items represent the domain or universe of the concept being measured, the greater the content validity (Sekaran, 2003). The items in the questionnaires were included based on recurring patterns that emerged when conducting the literature review so as to ensure content and face validity.
Face validity is considered by some as a basic and minimum index of content validity (Sekaran & Bougie, 2010). Face validity indicates that the items intended to measure a concept, do, on the face of it, look like they measure the concept.

Reliability measures the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. Reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the “goodness” of a measure (Sekaran, 2003). Reliability was ensured through consistency in the processes used to administer the instruments to various respondents.

5.6 Getting Ready for the Analysis
Once the data begins to flow, the researcher’s attention is drawn to data analysis. Managers require information, not data in raw form. Researchers need to, thus, generate this information by analyzing the data after it has been collected (Cooper & Schindler, 2008). Data preparation includes editing, coding and data entry and is the activity that ensures the accuracy of the data and their conversion from raw form to reduced and classified forms that are more appropriate for analysis (Cooper & Schindler, 2008).

5.6.1 Editing
After the data has been gathered through questionnaires they need to be edited. Data will be edited the same day that it is collected, so the respondents may be contacted for any further information or clarification. Incoming e-mailed questionnaires will be checked for incompleteness and inconsistencies. Inconsistencies that can be logically corrected will be rectified and edited at this stage (Hair et al., 2000; Sekaran, 2003; Zikmund, 2000). Editing detects errors and omissions and certifies that maximum data quality standards are achieved. The editor’s purpose is to guarantee that the data is:

- Accurate
- Consistent with intent of the question and other information in the survey
- Uniformly entered
- Complete
• Arranged to simplify coding and tabulation (Cooper & Schindler, 2008).

5.6.2 Handling Blank Responses
Not all respondents answer every item in the questionnaire. Answers may be left blank because the respondent did not know the answer, was not willing to answer or was indifferent to answer the entire questionnaire. If a substantial number of questions, for example, 25 percent of the items have been left unanswered in the questionnaire then that specific questionnaire will not be included in the data set for analysis. In this study, blank responses will be handled by assigning a zero (0) to them.

5.6.3 Coding
The researcher will design a precoded questionnaire to capture and key in data. This method enhances the speed and accuracy of the data capturing, especially when there are many items in the questionnaire and the number of questions are large. If for example, the variable is gender, the partitions are male and female; a numerical code of 1 will be assigned for male and 2 for females (Cooper & Schindler, 2008; Hair et al., 2000; Zikmund, 2000).

5.6.4 Categorisation
A scheme for categorising variables will be set up. Categorisation is the process of using rules to portion a body of data. Both open and closed ended questions must be coded (Cooper & Schindler, 2008). For the purpose of this study, two separate instruments will be administered to customers and call centre agents respectively. There are four variables that the both questionnaires tap on. The four variables have further sub-dimensions around which the questions in the questionnaires have been framed.

The first variable is Human Resources which revolve around the empowerment of service personnel to carry out their designated duties. According to Bailey & Leland (2008), numerous jobs that involve dealing with customers’ complaints are amongst the most stressful and can result in constant pressure, mental exhaustion and physical strain. In the agent’s questionnaire, the sub-dimension testing this variable comprises of skills, knowledge, ability, attitude and performance to which questions 1, 2, 6, 7, 8, 12, 21, 30 and
The sub-dimension of interpersonal skills is tested in questions 11, 13, 14, 15, 16, 17 and 18. The sub-dimension of remuneration/motivation is tested in questions 9, 10, 19, 20 and 31. The final sub-dimension of teamwork relating to the variable of Human resources is tested in questions 22, 23, 24, 25 and 26 of the questionnaire.

In terms of the customers’ questionnaire, the variable Human resources similarly taps the sub-dimension of skills, knowledge, ability, attitude and questions 2, 4 and 5 relate to customers’ expectations of this sub-dimension. In addition, the sub-dimension of interpersonal skills is tested in questions 1, 3, 6 and 10 and finally, the sub-dimension of training and development is tested in questions 7, 8 and 9.

The second variable in the study, namely, customer service perceptions embrace several elements including desired service level, adequate service, predicted service and zone of tolerance which falls between the desired and actual service levels (Lovelock, 2001). For the agents’ questionnaire, the sub-dimension measuring customer’s perception of service is the ease of communication between the agent and the customer and questions 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 test this sub-dimension. For the customer questionnaire, the sub-dimension of delivery of service is tested in questions 1, 2, 4, 8 and 11. The sub-dimension of service excellence is tested in questions 3, 5, 6, 14 and 16. The sub-dimension of service retention is quizzed in questions 7, 15, 17, 18 and 19 and finally, the sub-dimension of loyalty is tested in questions 9, 10, 12 and 13.

The third variable in the study focuses on technology which revolves around the role that technology plays in facilitating communication in the call centre. For the customers’ questionnaire, the sub-dimension of systems efficiency relates to questions 1, 4, 11 and 13. The sub-dimension measuring ease of use is tested in questions 2, 5, 6, 9 and 10. Finally, the sub-dimension of clarity is tested in questions 3, 7, 8, 12 and 14. For the agents’ questionnaire, the sub-dimension measuring systems understanding/ease of use is tested in questions 1, 2, 3, 4, 5 and 6 and the sub-dimension of personal interaction versus self service is quizzed in questions 7, 8, 9, 10, 11 and 12.
The fourth and final variable is Infrastructure/sick building syndrome. This term is applied to conditions in which a combination of factors such as chemicals, smoke, fumes and other components of building materials compromises the quality of indoor air and health deterioration in workers. In the agents’ questionnaire, the sub-dimensions testing layout/style of office is quizzed in questions 1, 2, 11 and 17. The sub-dimension testing effectiveness of lighting and ventilation is tested in questions 5, 6, 7, 8, 12, 13 and 14. The sub-dimension testing ergonomic design of workstation is quizzed in questions 3, 4, 15, 16 and 23. The sub-dimension of health and performance of agents is tested in questions 18, 19, 20, 21 and 22 and the final sub-dimension which is noise/aesthetics on performance is measured by questions 9, 10, 24 and 25.

For the customer questionnaire, the sub-dimension of the variable infrastructure/sick building is tested by exploring two aspects. The first aspect is waiting lines and questions 1, 2 and 3 measure this. The second aspect is ease of communication (attention) and questions 4, 5, 6, 7 and 8 measure this.

5.6.5 Entering Data
Since no scanner answer sheets will be used, the raw data will have to be manually keyed into the computer. Raw data will be entered using a software program. Microsoft Office Excel version 2007 will be used.

5.7 Data Analysis
Data analysis has 3 main objectives: (1) getting a feel for the data, (2) testing the goodness of data and (3) testing the hypotheses developed for the research (Sekaran, 2003). Figure 5.1 depicts a flow diagram of the data analysis process.
5.7.1 Descriptive Statistics

Descriptive statistics are used to describe the basic features of the data in a study. It provides simple summaries about the sample and the measures (Aaker et al., 1995; Hair et al., 2000).

5.7.1.1 Frequencies and Percentages

Frequencies simply refer to the number of times a certain phenomenon occurs, from which the percentage and cumulative percentage of their occurrence can be easily calculated. Frequencies can also be visually displayed by bar charts, histograms or pie charts which help to vividly interpret the data (Hair et al., 2000; Sekaran & Bougie, 2010; Zikmund, 2003). Percentages are useful ways to show relative relationships between variables and are widely used as they reveal the importance of figures more clearly then original data (Wiid & Diggines, 2009).

5.7.1.2 Measures of Central Tendency
There are 3 measures of central tendency: the mean, the median and the mode.

❖ The Mean
The mean or average is a measure of central tendency that offers a general picture of the data (Sekaran & Bougie, 2010). It is the sum of all the values divided by the number of values (Wiid & Diggines, 2009). In terms of the customer questionnaire, mean analyses will be conducted for Section B and the sub-dimensions of Section B, Section C and sub-dimensions of Section C, Section D and sub-dimensions of Section D and Section E and the sub-dimensions of Section E. In terms of the agents’ questionnaire, mean analyses will be carried out on Section B and sub-dimensions of Section B, Section C and sub-dimensions of Section C, Section D and sub-dimensions of section D and Section E and sub-dimensions of Section E.

❖ The Median
The median is the middle value between the lowest and the highest value. The values are arranged from low to high or from high to low to determine the median. If a sample consists of an equal number of respondents, the median is calculated by adding the two middle numbers and dividing the total by two (Hair et al., 2000; Wiid & Diggines, 2009).

❖ The Mode
The mode is the value that appears most frequently in a series of data. In a graphic representation of the data distribution, the mode is always the highest point of the graph (Cooper & Schindler, 2008; Sekaran & Bougie, 2010; Wiid & Diggines, 2009; Zikmund, 2000).

5.7.1.3 Measures of Dispersion
Measures of dispersion reflect how the data is spread around the measure of central tendency (Wiid & Diggines, 2009; Zikmund, 2000). One would like to know about the variability that exists in a set of observations. Like the measure of central tendency, the measure of dispersion is also unique to nominal and interval data (Sekaran & Bougie, 2010; Zikmund, 2000). The 3 measures of dispersion connected with the mean are the range, variance and standard deviation.
Range
Range refers to the difference in the extreme values in a set of observations (Aaker et al., 1995).

The Variance
The variance is calculated by subtracting the mean for each of the observations in the data set, taking the square of the difference and dividing the total of these by the number of observations. Variance gives an indication of how dispersed the data in a data set are (Zikmund, 2003).

The Standard Deviation
The standard deviation offers an index of the spread of a distribution of variability in the data. It is a commonly used measure of dispersion and is simply the square root of the variance (Cooper & Schindler, 2008; Sekaran & Bougie, 2010; Wiid & Diggines, 2009). In this study, this measure of dispersion will be used to assess the extent to which agents’ perceptions vary in terms of the influence of the four dimensions of the study (human resources, technology, infrastructure/sick building syndrome and customers) on call centre effectiveness. Additionally, it will also be used to assess the extent to which customers’ perceptions vary in terms of the four dimensions of the study (human resources, customer service, technology and infrastructure) on call centre effectiveness.

5.7.2. Inferential Statistics
Inferential statistics tries to reach conclusions that extend beyond the immediate data alone. It is used to make inferences from our data to more general conditions (Cooper & Schindler, 2008).

5.7.2.1 Pearson Correlation
The Pearson correlation matrix will indicate the direction, strength and significance of the bivariate relationships of all the variables in the study. The Pearson correlation coefficient is appropriate for interval and ratio-scaled variables (Aaker, Kumar, Day & Lawley, 2005; Sekaran, 2003; Wegner, 2000). In research that includes many variables, beyond knowing the means and standard deviations of the dependent variable and independent variable, we would often like to decipher how one variable relates to another. In other words we would
like to see the nature, direction and significance of the bivariate relationships of the variables used in the study. Correlations are derived by assessing the variations in one variable as another variable also varies (Sekaran, 2003).

The correlation matrix will be conducted among the following sections between both the customers’ and agents’ questionnaire. The sections are as follows:-

- Between Section B (Human Resources) of the agents’ questionnaire and Section B (Human Resources) of the customers’ questionnaire
- Between Section C (Technology) of the agents’ questionnaire and Section D (Technology) of the customers’ questionnaire
- Between Section D (Infrastructure/Sick Building Syndrome) of the agents’ questionnaire and Section E (Infrastructure) of the customers’ questionnaire and
- Between Section E (Customers) of the agents’ questionnaire and Section C (Customer Service) of the customers’ questionnaire.

5.7.2.2 t-Test

There are instances when one would be interested to know if two groups are different from each other on a particular interval-scaled or ratio-scaled variable of interest. To answer these questions a t-test is done to see if there are any significant differences in the means for two groups in the variable of interest. That is a nominal variable that is split into two subgroups is tested to see if there is a significant mean difference between the two split groups on a dependent variable which is measured on an interval or ratio scale (Hair et al., 2000; Sekaran, 2003). In this study the t-test will be used to determine whether or not the means of the two split groups (male and female) are significantly different from one another with respect to perceptions of human resources, customer perception, remuneration, performance, technology, infrastructure and sick building syndrome on an agent’s performance. And whether or not the means of the two split groups (male and female), are significantly different from one another with respect to customers perceptions, human resource, technology, infrastructure and sick building on service outcomes.
The t-test will be conducted between Sections B (Human Resources), C (Customer Service), D (Technology) & E (Infrastructure) for gender respectively in the customers’ questionnaire. It will be conducted between sections B (Human Resources), C (Technology), D (Infrastructure/Sick Building Syndrome), E (Customers) and gender and employment status respectively on the agents’ questionnaire.

5.7.2.3 ANOVA

Whereas the t-test would indicate whether or not there is a significant mean difference in a dependent variable between two groups, an analysis of variance (ANOVA) helps to examine the significant mean differences among more than two groups of an interval or ratio-scaled dependent variable. Therefore, unlike the t-test, it has no restriction on the number of means (Hair et al., 2000; Sekaran, 2003; Sekaran & Bougie, 2010). In this study, instead of asking merely whether two means differ, we can ask if a number of means differ. Hence, the result of ANOVA will show whether or not the means of the various groups (call centre agents varying in age, race, tenure, educational qualification and employment status) are significantly different from one another with respect to the sub dimensions of human resources, customer perception, technology, infrastructure and sick building syndrome. The result of ANOVA will also show whether or not the means of the various groups (of customers varying in gender, age, race and educational qualification) are significantly different from one another with respect to the sub dimension of human resources, customer perceptions, technology, infrastructure and sick building syndrome.

The Post-Hoc Scheffe’s test is the most popular of the post-hoc procedures. It is also the most flexible and the most conservative. Scheffe’s procedure corrects alpha for all pair-wise or simple comparisons of means, and also for all complex comparisons of means as well. Complex comparisons involve contrasts of more than two means at a time (Cooper & Schindler, 2008). The Scheffe’s test computes a new critical value for an F test conducted when comparing two groups from the larger ANOVA.

ANOVA will be undertaken between Sections B (Human Resources), C (Customer Service), D (Technology) & E (Infrastructure) for each of the biographical variables (age, race,
highest educational qualification) respectively for the customers’ questionnaire. ANOVA will also be undertaken between Sections B (Human Resources), C (Technology), D (Infrastructure/Sick Building Syndrome), E (Customers) and each of the biographical variables (age, race, tenure, highest educational qualification) respectively for the agents’ questionnaire.

5.7.2.4 Multiple Regression
Multiple regression analysis is done to examine the simultaneous effort of several independent variables on a dependent variable that is interval-scaled. In other words, multiple regression analysis aids in understanding how much of the variance in the dependent variable is explained by a set of predictors (Aaker et al., 2005; Sekaran, 2003). The regression coefficients are stated in either raw scores or as standardized coefficients. In either case the value of the regression coefficient states the amount that $Y$ varies with each unit change of the associated $X$ variable when the effects of all other $X$ variables are being held constant. When regression coefficients are standardized they are called beta weights and their values indicate the relative importance of the associated $X$ values, particularly when the predictors are unrelated (Cooper & Schindler, 2008).

Multiple regression will be conducted on the customers’ questionnaire in order to assess the extent to which the sub-dimensions (Human Resources, Customer Service, Technology and Infrastructure) significantly account for the variance in customers’ perceptions of call centre effectiveness. Furthermore, multiple regression will be computed on the agents’ questionnaire in order to determine the extent to which the sub-dimensions (Human Resources, Technology, Infrastructure/Sick Building Syndrome and Customers) significantly account for the variance in agents’ perceptions of call centre effectiveness.

5.8 Statistical Analysis of the Questionnaire
The psychometric properties of the questionnaire (validity and reliability) will be statistically determined using Factor Analysis and Cronbach’s Coefficient Alpha respectively.
Validity

Factorial validity can be established by submitting the data for factor analysis. The results of factor analysis (a multivariate technique) will confirm whether or not the theorized dimensions emerge. Factor analysis will reveal whether the dimensions are indeed tapped by the items in the measure as theorized. Factor analysis helps to reduce a vast number of variables to a meaningful, interpretable and manageable set of factors (Aaker et al., 2005; Sekaran, 2003; Sekaran & Bougie, 2010). Call centre agents are likely to be suspicious of the intentions of the researcher, so to with customers. Call centre agents may perceive the researcher as taking sides in favour of management and are likely to propose an increase in workload or an increase in training and development and so on. Thus it will be important to ensure that all respondents are aware of the researcher’s purpose as being one to simply understand the current nature of the workplace. Likewise with the customer questionnaire they need to understand that the researcher is simply trying to understand the effectiveness of the call centre in managing their needs.

Reliability

The reliability of the questionnaire will be established by testing for both consistency and stability. Cronbach’s Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. Cronbach’s Alpha is computed in terms of the average intercorrelations among the items measuring the concept. The closer Cronbach’s Alpha is to 1, the higher the interval consistency reliability (Sekaran, 2003). For the purposes of this research the consistency will indicate to the researcher how well the items measuring the different aspects in the questionnaire will fit together as a set.

5.9 Conclusion

The researcher will use descriptive and inferential statistics to analyze the data generated by both questionnaires. Both types of statistics have been explored in this chapter. In addition steps to ensure reliability and validity of the instruments have been detailed. Such information is essential to managers to try and correct gaps that may have arisen between customers’ expectations and perceptions of service quality. Hence, corrective measures can be used to implement long term future goals and strategies to counteract the efforts of these
gaps from the perspective of call centre agents and consumers. The next chapter will present the results of the study.
CHAPTER SIX

Presentation of Results

6.1 Introduction

The data received from the customer and call centre agents questionnaires was captured on Microsoft Office Excel Version 2007 and was processed using SPSS. In this chapter the data analysis techniques highlighted in Chapter 5 will be applied to present and analyse the results obtained from the computational applications using SPSS.

Due to the dual perspective of the study, namely the customer perspective and the call centre agents’ perspective, for convenience and ease of reading the results will be discussed in two distinct sections. A combination of qualitative and quantitative results will be presented in narrative, graphical and tabular form.

Furthermore, the results will also be discussed under the key dimensions of the study.

6.2 Presentation of Results

‘The results of the descriptive and inferential statistics will be presented using tabular and graphical representations. The data analysis firstly involved the examination of the frequency distribution of the results for each of the scale items included so as to determine whether the data was normally distributed. The normality of the distribution of results of each scale item was determined in order to determine whether parametric or non-parametric tests should be used to test the hypotheses formulated for the study. The distribution of results can be considered normal if it exhibits a skewness of less than an absolute value of 2.00 and a kurtosis of the distribution of less than 7.00 (West, Finch & Curran, 1995:79). All scale items used fall within these parameters. Based on this fact and the fact that the sample size is relatively large (n = 371), parametric test were considered suitable for hypotheses testing’.
6.2.1 Descriptive Statistics: Agents

Agents’ perspectives of the extent to which Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers influences the effectiveness of the call centre was evaluated using descriptive statistics (Table 6.1). The higher the mean score value, the more convinced agents are that Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers influence the effectiveness of the call centre.

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>3.6203</td>
<td>0.59278</td>
<td>1.87</td>
<td>5.00</td>
</tr>
<tr>
<td>Technology</td>
<td>3.6656</td>
<td>0.64341</td>
<td>1.75</td>
<td>5.00</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>3.2104</td>
<td>0.64644</td>
<td>1.53</td>
<td>5.00</td>
</tr>
<tr>
<td>Customers</td>
<td>3.4815</td>
<td>0.52781</td>
<td>1.70</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Table 6.1 indicates that agents’ perceptions of the dimensions influencing call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:
- Technology (Mean = 3.6656)
- Human Resource (Mean = 3.6203)
- Customers (Mean = 3.4815)
- Infrastructure/Sick Building Syndrome (Mean = 3.2104)

The perceived impact of the aforementioned dimensions on call centre effectiveness is depicted graphically (Figure 6.1).
Figure 6.1
Descriptive Statistics: Perceptions of Agents of the dimensions influencing Call Centre effectiveness

These overall scores indicate only a moderate positive impact of the dimensions on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all of the dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers), with the greatest development need being for infrastructure/sick building syndrome.

In order to assess the areas for improvement, frequency analyses were conducted for each of the sub-dimensions of the four main dimensions influencing call centre effectiveness. Agents’ perceptions of the influence of the sub-dimensions of Human Resource on call centre effectiveness were evaluated using descriptive statistics (Table 6.2).
Table 6.2 indicates that agents’ perceptions of the influence of the sub-dimensions of Human Resource on call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:

- Skills, knowledge, ability, attitude, performance (Mean = 3.9088)
- Interpersonal skills (Mean = 3.9035)
- Training and development (Mean = 3.6854)
- Teamwork (Mean = 3.6464)
- Remuneration/motivation (Mean = 2.9576)

The overall score indicates only a moderate level of satisfaction and perceived influence (Mean = 3.6203) on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all of the sub-dimensions of Human Resource.

In order to assess the areas for improvement, frequency analyses were conducted on each of the sub-dimensions. In terms of skills, knowledge, ability, attitude and performance, 14.6% of the agents disagreed and a further 7.3% of the agents strongly disagreed that they have complete authority to make decisions to satisfy customer complaints. Furthermore, 7.9% of the agents disagreed and a further 6.6% of the agents strongly disagreed that they experience mental exhaustion and physical strain and that it does not hinder their communication with
customers’, implying that mental exhaustion does hinder communication between agents and customers.

On a positive note however, in terms of skills, knowledge, ability, attitude and performance, 37.7% of the agents agreed and a further 49% strongly agreed that they fully understood the responsibilities associated with their job. Furthermore, 44.4% of the agents agreed and a further 42.4% strongly agreed that they focused on delivering quality service rather than quantity.

In terms of interpersonal skills 9.3% of the agents disagreed and a further 7.3% of the agents strongly disagreed that they felt comfortable enough to inform the supervisor when they felt they were not coping with work pressure. Furthermore, 12.6% of the agents disagreed and 11.3% of the agents strongly disagreed that they felt comfortable with using a pre-prepared telephone script when taking a call.

On a more positive note, in terms of interpersonal skills, 36.4% of the agents agreed and a further 51.7% of the agents strongly agreed that they give off their best with every call that they handle. A further 43.7% of the agents agreed and 43% strongly agreed that they were always courteous to all customers.

In terms of training and development, 17.9% of the agents disagreed and another 13.9% strongly disagreed that they found their jobs fulfilling in terms of opportunities for growth and advancement. A further 8.6% of the agents disagreed and 5.3% of the agents strongly disagreed that they have been provided with comprehensive manuals containing sufficient information to be able to handle complaints or queries efficiently.

In terms of remuneration/motivation which scored the lowest (Mean = 2.9576), 21.2% of the agents disagreed and 25.8% of the agents strongly disagreed that they were pleased with the rewards and recognition that they receive when they have performed well. Furthermore, 24.5% of the agents disagreed and 28.5% of the agents strongly disagreed that management always gives its staff good incentives to motivate them to work harder. Finally, 23.2% of the
agents disagreed and a further 17.2% strongly disagreed that they believe that their salary was market related.

In terms of the final sub-dimension of teamwork, 12.6% of the agents disagreed and 5.3% of the agents strongly disagreed that their team leader/manager uses effective techniques to encourage high achievement. Furthermore, 15.9% of the agents disagreed and 9.3% of the agents strongly disagreed that they were provided with continuous feedback to help improve their job performance.

Agents’ perception of the influence of the sub-dimensions of Technology on call centre effectiveness was evaluated using descriptive statistics (Table 6.3).

Table 6.3
Descriptive Statistics: Agents’ perceptions of the sub-dimensions of Technology on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>System’s understanding/ease of use</td>
<td>4.0364</td>
<td>0.6761</td>
<td>2.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Personal interaction versus self service</td>
<td>3.2947</td>
<td>0.7994</td>
<td>1.33</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Overall Score</strong></td>
<td><strong>3.6656</strong></td>
<td><strong>0.6434</strong></td>
<td><strong>1.75</strong></td>
<td><strong>5.00</strong></td>
</tr>
</tbody>
</table>

Table 6.3 indicates that agents’ perceptions of the sub-dimensions of Technology on call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:-

- System’s understanding/ease of use (Mean = 4.0364)
- Personal interaction versus self service (Mean = 3.2947)

The overall mean score indicates a moderate level of satisfaction and perceived influence (Mean = 3.6656) of technology on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of the sub-dimensions of technology.
In order to assess the areas of improvement, frequency analyses were conducted for both of these sub-dimensions. In terms of system’s understanding/ease of use, 6.6% of the agents disagreed and a further 3.3% strongly disagreed that they always dealt with electronic queries/complaints within 24 hours of receiving them. Furthermore, 9.3% of the agents disagreed and a further 6.6% of the agents strongly disagreed that the software is fast and reliable.

On a positive note, in terms of system’s understanding/ease of use, 39.7% of the agents agreed and 48.3% strongly agreed that they were fully computer literate. Furthermore, 41.1% of the agents agreed and a further 43.7% strongly agreed that they fully knew how to use the software systems adopted in the call centre.

In terms of personal interaction versus self service 18.5% of the agents disagreed and 13.2% of the agents strongly disagreed that web based e-services are more effective for addressing customer needs than talking to an agent. Furthermore, 23.8% of the agents disagreed and another 13.2% strongly disagreed that web based communication facilitates communication between the firm and the customer better than an agent can.

Agents’ perceptions of the influence of the sub-dimensions of Infrastructure/Sick building Syndrome on call centre effectiveness were evaluated using descriptive statistics.

Table 6.4
Descriptive Statistics: Agents’ perceptions of the sub-dimensions of Infrastructure/Sick Building Syndrome on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>3.426</td>
<td>0.6818</td>
<td>1.25</td>
<td>5.00</td>
</tr>
<tr>
<td>Ergonomic design</td>
<td>3.233</td>
<td>0.8167</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Lighting &amp; ventilation</td>
<td>3.196</td>
<td>0.7793</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Health &amp; performance</td>
<td>3.317</td>
<td>0.7658</td>
<td>1.60</td>
<td>5.00</td>
</tr>
<tr>
<td>Noise &amp; aesthetics</td>
<td>2.880</td>
<td>0.7756</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Overall score</strong></td>
<td><strong>3.210</strong></td>
<td><strong>0.6464</strong></td>
<td><strong>1.53</strong></td>
<td><strong>5.00</strong></td>
</tr>
</tbody>
</table>
Table 6.4 indicates that agents’ perceptions of their work environment vary which in decreasing level of perceived satisfaction and influence are:

- Layout (Mean = 3.426)
- Health and performance (Mean = 3.317)
- Ergonomic design (Mean = 3.233)
- Lighting and ventilation (Mean = 3.196)
- Noise and aesthetics (Mean = 2.880)

The overall score indicates only a moderate level of satisfaction and perceived influence (Mean = 3.210) of Infrastructure/Sick Building Syndrome on the work environment. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all of the sub-dimensions of infrastructure/sick building syndrome.

In order to assess the areas for improvement, frequency analyses were conducted for each of the sub-dimensions. In terms of layout, 14.6% of the agents disagreed and a further 9.9% strongly disagreed with the statement that although laser copiers and printers are placed away from individuals, they are not inconvenient for them to access. Apart from the inconvenience of access, this finding suggests that emissions from the copiers and printers are prevalent and hence, layout and style of the office has the potential to impact on employee health and performance. Furthermore, 17.9% of the agents disagreed and a further 5.3% strongly disagreed that the layout of the office allows them to perform their job well.

In terms of ergonomic design, 23.2% of the agents disagreed and a further 23.2% strongly disagreed that their office chair is comfortable and easily adjustable. In addition, 21.9% of the agents disagreed and a further 7.9% strongly disagreed that their workstation equipment allows them to perform their job easily.

In terms of lighting and ventilation, 22.5% of the agents disagreed and a further 21.2% strongly disagreed that the temperature is constantly suitable in the office (does not get too hot or cold). Additionally, 19.2% of the agents disagreed and 13.9% strongly disagreed that the bright lights allow them to work well. Finally 19.9% of the agents disagreed and a further 9.3% strongly disagreed that they are always surrounded by a fresh supply of air.
In terms of health and performance, 16.6% of the agents disagreed and 13.9% strongly disagreed that conditions in their work environment such as bright computer screens and bright lighting does not cause headaches and eye strains nor hinders their performance. The implication is that glare has the potential to cause headaches and eye strains and reduce performance. Furthermore, 18.5% of the agents disagreed and a further 8.6% strongly disagreed that they are pleased with the general cleanliness of the office space.

In terms of the final sub-dimension of noise and aesthetics, 25.2% of the agents disagreed and a further 16.6% strongly disagreed that the décor of the workstation is aesthetically pleasing to produce a functional environment. Furthermore, 23.8% of the agents disagreed and a further 30.5% strongly disagreed that the cafeteria contributes to a relaxed environment.

Finally, agents’ perceptions of the influence of the sub-dimensions of Customers on call centre effectiveness were evaluated using descriptive statistics (Table 6.5).

Table 6.5
Descriptive Statistics: Agents’ perceptions of the influence of the sub-dimensions of Customers on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ease of communication between agent/customer</td>
<td>3.4815</td>
<td>0.5278</td>
<td>1.70</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Table 6.5 shows that agents’ perceptions of the sub-dimensions of customers in terms of effectiveness of communication between agents and customers on call centre effectiveness indicates a moderate level of satisfaction and perceived influence (Mean = 3.4815) on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of the sub-dimensions of ease of communication between the agent and the customer.

In order to assess the areas of improvement, mean analyses were conducted. In terms of the sub-dimensions of ease of communication between the agent and customer, 27.2% of the
agents disagreed and 34.4% of the agents strongly disagreed that customers are always polite. Furthermore, 17.2% of the agents disagreed and 2% strongly disagreed that customers always furnish them with adequate information for them to assist customers with their query/complaint immediately. A further 12.6% of the agents disagreed and 11.3% of the agents strongly disagreed that customers are very cooperative when talking to them. This is an indication that communication lines between agents and customers are not always quick and easy.

6.2.2 Descriptive Statistics: Customers

Customers’ perceptions of the extent to which Human Resource, Customer Service, Technology and Infrastructure influences the effectiveness of the call centre was evaluated using descriptive statistics (Table 6.6). The higher the mean score value, the more convinced customers are that Human Resource, Customer Service, Technology and Infrastructure influences the effectiveness of the call centre.

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>2.5768</td>
<td>0.7989</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Customer service</td>
<td>2.8625</td>
<td>0.5846</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Technology</td>
<td>1.7916</td>
<td>0.3286</td>
<td>0.60</td>
<td>2.84</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>2.6650</td>
<td>0.5526</td>
<td>1.00</td>
<td>4.70</td>
</tr>
</tbody>
</table>

Table 6.6 indicates that customers’ perceptions of the dimensions influencing call centre effectiveness vary, which in decreasing level of perceived satisfaction and influence are:-

- Customer service (Mean = 2.8625)
- Infrastructure (Mean = 2.6650)
- Human Resource (Mean = 2.5768)
- Technology (Mean = 1.7916)
The perceived impact of the aforementioned dimensions on call centre effectiveness is depicted graphically (Figure 6.2).

**Figure 6.2**

**Descriptive Statistics: Perceptions of Customers of the dimensions influencing Call Centre effectiveness**

![Bar chart showing the mean scores for different dimensions of call centre effectiveness: Human Resource (2.5768), Customer Service (2.8625), Technology (1.7916), and Infrastructure (2.665).]

These overall scores (Table 6.6; Figure 6.2) indicate a very low level of satisfaction and perceived influence of each of the dimensions on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all of the above dimensions, with dramatic deficiency being portrayed in terms of technology. In order to assess the areas for improvement, frequency analyses were conducted for each of the sub-dimensions of the four main dimensions influencing call centre effectiveness.

Customers’ perceptions of the influence of the sub-dimensions of Human Resource on call centre effectiveness were evaluated using descriptive statistics (Table 6.7).
Table 6.7
Descriptive Statistics: customers’ perceptions of the sub-dimensions of Human Resource on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills, knowledge, ability, attitude performance</td>
<td>2.6833</td>
<td>0.9267</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>2.6364</td>
<td>0.8106</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Training &amp; development</td>
<td>2.4106</td>
<td>0.8377</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Overall score</strong></td>
<td><strong>2.5768</strong></td>
<td><strong>0.7990</strong></td>
<td><strong>1.00</strong></td>
<td><strong>5.00</strong></td>
</tr>
</tbody>
</table>

Table 6.7 indicates that customers’ perceptions of the influence of the sub-dimensions of Human resource on call centre effectiveness vary, which in decreasing level of perceived satisfaction and influence are:-

1. Skills, knowledge, ability, attitude (Mean = 2.6833)
2. Interpersonal skills (Mean = 2.6364)
3. Training and development (Mean = 2.4106)

The overall score indicates a low level of satisfaction and perceived influence (Mean = 2.5768) of Human Resource on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all the sub-dimensions of Human Resource.

In order to assess the areas for improvement, frequency analyses were conducted on each of the sub-dimensions. In terms of skills, knowledge, ability and attitude, 38.2% of the customers disagreed and a further 13.6% strongly disagreed that agents are extremely efficient in handling their needs. Furthermore, 34.5% of the customers disagreed and a further 10.5% strongly disagreed that agents try hard to resolve their query/complaint promptly.

In terms of interpersonal skills, 38.2% of the customers disagreed and another 16.4% strongly disagreed that they find communicating with an agent always being simple. Furthermore, 38.2% of the customers disagreed and 26.8% of the customers strongly disagreed that agents welcome feedback on how to improve their level of service delivery.
In terms of the final sub-dimension of training and development, 32.3% of the customers disagreed and a further 15.9% strongly disagreed that they are seldom transferred to different agents none of whom can assist with their query. The implication is that customers are burdened with being transferred to other agents who try to assist with their queries. Furthermore, 38.2% of the customers disagreed and 39.1% of the customers strongly disagreed that agents always follow up to check if the customer was satisfied with their service performance.

Customers’ perceptions of the influence of the sub-dimensions of Customer Service on call centre effectiveness were evaluated using descriptive statistics (Table 6.8).

Table 6.8

Descriptive Statistics: Customers’ perceptions of the sub-dimension of Customer Service on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery of service</td>
<td>2.9297</td>
<td>0.6939</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Service excellence</td>
<td>2.6402</td>
<td>0.7792</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Service retention</td>
<td>2.3607</td>
<td>0.7948</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Loyalty</td>
<td>3.5194</td>
<td>0.6500</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Overall score</strong></td>
<td><strong>2.8625</strong></td>
<td><strong>0.5845</strong></td>
<td><strong>1.00</strong></td>
<td><strong>5.00</strong></td>
</tr>
</tbody>
</table>

Table 6.8 indicates that customers’ perceptions of the influence of the sub-dimensions of customer service on call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:-

- Loyalty (Mean = 3.5194)
- Delivery of service (Mean = 2.9297)
- Service excellence (Mean = 2.6402)
- Service retention (Mean = 2.3607)

The overall score indicates a low level of satisfaction and perceived influence (Mean = 2.8625) of customer service on call centre effectiveness. Against the maximum attainable
score of 5, it is evident that there is room for improvement in terms of all of the sub-dimensions of customer service.

In order to assess the areas for improvement, frequency analyses were conducted on each of the sub-dimensions. In terms of delivery of service, 38.2% of the customers disagreed and 12.3% of the customers strongly disagreed that the level of service they receive from the call centre is always reliable. In addition, 29.5% of the customers disagreed and a further 26.8% strongly disagreed that they prefer to use the call centre because it is easy to access and make contact with an agent.

In terms of the sub-dimension of service excellence, 32.7% of the customers disagreed and another 20.5% of the customers strongly disagreed that the firm always strives to exceed the customers’ expectations of them in terms of service delivery. Furthermore, 33.2% of the customers disagreed and another 15.9% strongly disagreed that they received assurances from the call centre that the firm is dedicated to ensuring their satisfaction.

In terms of the sub-dimension of service retention, 32.7% of the customers disagreed and another 27.7% strongly disagreed that the compensation that they received for inferior service was fair and equitable. Furthermore, 33.2% of the customers disagreed and 25% of them strongly disagreed that the call centre of the firm offers good incentives to them to keep doing business with the firm.

In terms of the sub-dimension of loyalty, 17.7% of the customers disagreed and 12.7% strongly disagreed that a service failure will not cause them to terminate doing business with the firm in future. Furthermore, 12.7% of the customers disagreed and 9.5% of the customers strongly disagreed that if their query/complaint is not resolved favourably then they are inclined to switch to another service provider. This could mean that due to a lack of competitors in this particular service industry customers are forced to maintain business relationships with the firm even in the event of poor quality services being received. Customers’ perceptions of the influence of the sub-dimensions of Technology on call centre effectiveness were evaluated using descriptive statistics (Table 6.9).
Table 6.9
Descriptive Statistics: Customers’ perceptions of the sub-dimensions of Technology on Call Centre effectiveness

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>System’s efficiency</td>
<td>2.9773</td>
<td>0.6353</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Ease of use</td>
<td>3.0782</td>
<td>0.7886</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Clarity</td>
<td>2.9027</td>
<td>0.5319</td>
<td>1.00</td>
<td>4.40</td>
</tr>
<tr>
<td><strong>Overall score</strong></td>
<td><strong>1.7916</strong></td>
<td><strong>0.3286</strong></td>
<td><strong>0.60</strong></td>
<td><strong>2.84</strong></td>
</tr>
</tbody>
</table>

Table 6.9 indicates that customers’ perceptions of the influence of the sub-dimensions of Technology on call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:

- Ease of use (Mean = 3.0782)
- System’s efficiency (Mean = 2.9773)
- Clarity (Mean = 2.9027)

The overall score indicates a low level of satisfaction and perceived influence (Mean = 1.7916) of Technology on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of all of the sub-dimensions of Technology.

In order to assess the areas of improvement, frequency analyses were conducted on each of the sub-dimensions. In terms of system’s efficiency, 25.5% of the customers disagreed and another 12.7% strongly disagreed that they find it easy to use interactive voice response (IVR) software when they contact the call centre. In addition, 32.7% of the customer’s disagreed and a further 18.6% strongly disagreed that calling the call centre is as effective as using the self service options such as email and internet.

In terms of the sub-dimension of ease of use, 26.8% of the customers disagreed and 7.7% strongly disagreed that self service options are quick and easy to use. Furthermore, 17.7% of the customers disagreed and 11.4% strongly disagreed that the firm’s website is user-friendly.
In terms of clarity, 26.8% of the customers disagreed and 10% strongly disagreed that the self service options are useful in assisting with handling their queries. Furthermore, 38.6% of the customers disagreed and 19.5% strongly disagreed that they frequently visit blogs to share information about their service encounter with the firm.

Customers’ perceptions of the influence of the sub-dimension of Infrastructure on call centre effectiveness were evaluated using descriptive statistics (Table 6.10).

### Table 6.10
**Descriptive Statistics: Customers’ perceptions of the sub-dimensions of Infrastructure on Call Centre effectiveness**

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting lines</td>
<td>2.4045</td>
<td>0.6738</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Ease of communication (attention)</td>
<td>2.9255</td>
<td>0.6452</td>
<td>1.00</td>
<td>4.60</td>
</tr>
<tr>
<td>Overall score</td>
<td>2.6650</td>
<td>0.5526</td>
<td>1.00</td>
<td>4.70</td>
</tr>
</tbody>
</table>

Table 6.10 indicates that customers’ perceptions of the influence of the sub-dimensions of Infrastructure on call centre effectiveness vary, which in decreasing level of satisfaction and perceived influence are:

- Ease of communication (attention) (Mean = 2.9255)
- Waiting lines (Mean = 2.4045)

These overall scores indicate a very low level of satisfaction and perceived influence (Mean = 2.6650) of infrastructure on call centre effectiveness. Against the maximum attainable score of 5, it is evident that there is room for improvement in terms of the sub-dimensions of Infrastructure.

In order to assess the areas for improvement, frequency analyses were conducted on each of the sub-dimensions. In terms of waiting lines, 39.5% of the customers disagreed and another 28.6% strongly disagreed that long waiting lines do not deter them from calling the call centre. The implication is that long waiting lines serve as a deterrent for customers wanting to call the call centre. Furthermore, 34.5% of the customers disagreed and 21.4% strongly
disagreed that based on their previous interactions with the call centre, they are of the opinion that the call centre is coping with the demands placed on it by customers.

In terms of ease of communication, 28.6% of the customers disagreed and a further 10.9% strongly disagreed that call centre agents are able to maintain a good level of concentration on their query at any time of the day. Furthermore, 34.5% of the customers disagreed and another 10.5% strongly disagreed that the call centre agents are able to provide them with accurate information with regards to their queries. This indicates that the customer finds it problematic to communicate with agents in the call centre.

**Comparison of Agents’ and Customers’ perceptions of the factors impacting on Call Centre Effectiveness**

Overall, it is clear that agents believe that call centre effectiveness is predominantly affected by infrastructure and aspects that promote sick building syndrome. They perceive customer preferences for personal interaction as opposed to self service and, ease of communication between agent and customer to be factors impacting on call centre effectiveness. Remuneration of agents is also perceived as a demotivating factor in terms of call centre effectiveness. From a customer perspective, it is clear that customers believe that call centre effectiveness is affected by all of the key dimensions (Human Resources, Customer Service, Technology and Infrastructure) of the study thereby, indicating their overall dissatisfaction with call centre effectiveness. A comparison of the agents’ and customers’ perceptions of the dimensions influencing call centre effectiveness was undertaken (Figure 6.3).
These overall scores of agents and customers indicate a very low level of satisfaction and perceived positive influence of each of the dimensions on call centre effectiveness, with customer’s level of satisfaction being by far the lower of the two.

6.2.3 Inferential Statistics
Inferential statistics was conducted for both the agents’ and customers’ questionnaires.

6.2.3.1 Inferential Statistics: Agents
The perceptions of agents of the extent to which the key dimensions of the study (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) impact on call centre effectiveness were assessed.
Hypothesis 1:
As perceived by agents, there exist significant intercorrelations amongst the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) that have the potential to impact on call centre effectiveness.

Table 6.11

Pearson Correlation: Agents’ perceptions of the key dimensions impacting on Call Centre effectiveness (N = 151)

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>r/p</th>
<th>Human Resource</th>
<th>Technology</th>
<th>Infrastructure/Sick Building Syndrome</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>r</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>r</td>
<td>0.637</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>r</td>
<td>0.421</td>
<td>0.450</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000**</td>
<td>1</td>
</tr>
<tr>
<td>Customers</td>
<td>r</td>
<td>0.549</td>
<td>0.431</td>
<td>0.305</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000**</td>
<td></td>
</tr>
</tbody>
</table>

** p < 0.01

Table 6.11 reflects that the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) that have the potential to impact on call centre effectiveness significantly correlate with each other at the 1% level of significance. Therefore, hypothesis 1 may be accepted.

6.2.3.2 Inferential Statistics: Customers
The perceptions of customers of the extent to which the key dimensions of the study (Human Resource, Customer Service, Technology and Infrastructure) impact on call centre effectiveness were assessed.

Hypothesis 2:
As perceived by customers, there exist significant intercorrelations amongst the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) that have the potential to impact on call centre effectiveness.
Table 6.12

Pearson Correlation: Customers’ perceptions of the key dimensions impacting on Call Centre effectiveness (N = 220)

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>r/p</th>
<th>Human Resource</th>
<th>Customer Service</th>
<th>Technology</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>r</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>p</td>
<td>0.728</td>
<td>0.000**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>r</td>
<td>0.435</td>
<td>0.569</td>
<td>0.000**</td>
<td>1</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>r</td>
<td>0.717</td>
<td>0.632</td>
<td>0.440</td>
<td>0.000**</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>0.000**</td>
<td>0.000**</td>
<td>0.000**</td>
<td>1</td>
</tr>
</tbody>
</table>

** p < 0.01

Table 6.12 reflects that the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) that have the potential to impact on call centre effectiveness significantly correlate with each other at the 1% level of significance. Therefore, hypothesis 2 may be accepted.

6.2.3.3 Correlation between Customers and Agents Perceptions of the key dimensions impacting on Call Centre Effectiveness

The perceptions of both Customers and Agents of the key dimensions impacting on call centre effectiveness were assessed using correlation (Table 6.13).

Hypothesis 3:

There exist significant correlations in the perceptions of Customers and Agents regarding the key dimensions impacting on call centre effectiveness.
Table 6.13

Pearson Correlation: Customers (N = 220) and Agents (N = 151) Perception of the key dimensions impacting on Call Centre Effectiveness

<table>
<thead>
<tr>
<th>Sub-dimensions (Customers)</th>
<th>r/p</th>
<th>Sub-dimensions (Agents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>r 0.064</td>
<td>p 0.432</td>
</tr>
<tr>
<td>Technology</td>
<td>r 0.012</td>
<td>p 0.883</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>r 0.095</td>
<td>p 0.248</td>
</tr>
<tr>
<td>Customer Service</td>
<td>r 0.060</td>
<td>p 0.465</td>
</tr>
</tbody>
</table>

Table 6.13 indicates that the perceptions of Customers and Agents regarding the impact of the dimensions of the study on call centre effectiveness do not significantly correlate with each other. The implication is that Customers and Agents differ in their perceptions of the impact of each of the sub-dimensions (Human Resource, Technology, Infrastructure and Customer Service) on call centre effectiveness. This result supports the results of the descriptive analysis as depicted in Figure 6.3.

6.2.3.4 Influence of Biographical data: Agents

*Hypothesis 4:*

Agents varying in biographical profiles (gender, employment status, age, race, tenure, education) differ significantly in the perceptions of the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) having the potential to impact on call centre effectiveness respectively.
Table 6.14

t-test: Agents – Key dimensions of Call Centre effectiveness and Gender

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Gender</th>
<th>t</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td></td>
<td>-0.336</td>
<td>149</td>
<td>0.737</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>-0.003</td>
<td>149</td>
<td>0.998</td>
</tr>
<tr>
<td>Customers</td>
<td></td>
<td>0.623</td>
<td>149</td>
<td>0.534</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td></td>
<td>2.084</td>
<td>149</td>
<td>0.039*</td>
</tr>
</tbody>
</table>

* p < 0.05

Table 6.14 indicates that male and female agents differ significantly in the perceptions of the influence of Infrastructure/Sick Building Syndrome on call centre effectiveness at the 5% level of significance. In order to assess exactly where the significant differences lie, mean analyses were conducted (Table 6.15).

Table 6.15

t-test: Gender and sub-dimensions of Infrastructure/Sick Building Syndrome

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>Male</td>
<td>65</td>
<td>3.523</td>
<td>0.56721</td>
<td>1.536</td>
<td>149</td>
<td>0.127</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>3.352</td>
<td>0.75184</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ergonomic Design</td>
<td>Male</td>
<td>65</td>
<td>3.345</td>
<td>0.77501</td>
<td>1.464</td>
<td>149</td>
<td>0.145</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>3.149</td>
<td>0.84195</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting and Ventilation</td>
<td>Male</td>
<td>65</td>
<td>3.337</td>
<td>0.75188</td>
<td>1.943</td>
<td>149</td>
<td>0.054</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>3.089</td>
<td>0.78706</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Performance</td>
<td>Male</td>
<td>65</td>
<td>3.452</td>
<td>0.66075</td>
<td>1.911</td>
<td>149</td>
<td>0.058</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>3.214</td>
<td>0.82536</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise and aesthetics</td>
<td>Male</td>
<td>65</td>
<td>3.019</td>
<td>0.70753</td>
<td>1.924</td>
<td>149</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>2.777</td>
<td>0.81171</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.15 reflects that male and female agents do not differ significantly in their perceptions of the sub-dimensions of infrastructure/sick building syndrome although mean differences in the perceptions of male and female agents with regards to lighting and ventilation, health and performance and noise and aesthetics approaches significance with male agents having a more positive outlook of these sub-dimensions of infrastructure.
However, Table 6.14 also reflects that male and female agents do not differ significantly in the perceptions of the influence of the remaining key dimensions (Human Resource, Technology and Customers) on call centre effectiveness respectively. Hence, hypothesis 4 may be only be partially accepted in terms of gender.

**Table 6.16**

**t-test: Agents – Key dimensions of Call Centre effectiveness and Employment status**

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td>Human Resource</td>
<td>0.838</td>
</tr>
<tr>
<td>Technology</td>
<td>0.853</td>
</tr>
<tr>
<td>Customers</td>
<td>1.226</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>-2.259</td>
</tr>
</tbody>
</table>

* p < 0.05

Table 6.16 reflects that agents employed on a full time and part time basis differ significantly in the perceptions of the influence of Infrastructure/Sick Building Syndrome on call centre effectiveness at the 5% level of significance. In order to assess exactly where the significant differences lie, mean analyses were conducted (Table 6.17).

**Table 6.17**

**t-test: Employment Status and sub-dimensions of Infrastructure/Sick Building Syndrome**

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>Employment</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>Full time</td>
<td>100</td>
<td>3.390</td>
<td>0.68840</td>
<td>-.895</td>
<td>149</td>
<td>0.372</td>
</tr>
<tr>
<td></td>
<td>Part time</td>
<td>51</td>
<td>3.495</td>
<td>0.66987</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ergonomic Design</td>
<td>Full time</td>
<td>100</td>
<td>3.134</td>
<td>0.79952</td>
<td>-2.111</td>
<td>149</td>
<td>0.036*</td>
</tr>
<tr>
<td></td>
<td>Part time</td>
<td>51</td>
<td>3.428</td>
<td>0.82367</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting and Ventilation</td>
<td>Full time</td>
<td>100</td>
<td>3.107</td>
<td>0.80387</td>
<td>-1.977</td>
<td>149</td>
<td>0.050*</td>
</tr>
<tr>
<td></td>
<td>Part time</td>
<td>51</td>
<td>3.369</td>
<td>0.70403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and Performance</td>
<td>Full time</td>
<td>100</td>
<td>3.192</td>
<td>0.75901</td>
<td>-2.865</td>
<td>149</td>
<td>0.005**</td>
</tr>
<tr>
<td></td>
<td>Part time</td>
<td>51</td>
<td>3.561</td>
<td>0.72556</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise and Aesthetics</td>
<td>Full time</td>
<td>100</td>
<td>2.810</td>
<td>0.79940</td>
<td>-1.578</td>
<td>149</td>
<td>0.117</td>
</tr>
<tr>
<td></td>
<td>Part time</td>
<td>51</td>
<td>3.019</td>
<td>0.71387</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < 0.01
* p ≤ 0.05
Table 6.17 indicates that full time and part time agents differ significantly in their perceptions of the influence of infrastructure/sick building syndrome on their health and performance in executing their jobs at the 1% level of significance, and of ergonomic design and lighting and ventilation at the 5% level of significance. However, employment status does not influence agent’s perception of workplace layout and noise and aesthetics respectively. Hence, hypothesis 4 may only be partially accepted in terms of employment status. In order to assess exactly where the difference lies in terms of employment status, mean analyses were conducted for each of the dimensions. In terms of the sub-dimensions of ergonomic design, lighting and ventilation and health and performance on agent’s performance, part time employees are more satisfied than full time employees (Table 6.17); perhaps because they spend shorter hours in the work environment than full time employees.

Table 6.16 also reflects that employment status (full and part time) does not significantly impact on agent’s perceptions of the influence of the remaining key dimensions (Human Resource, Technology and Customers) on call centre effectiveness respectively. Hence, hypothesis 4 may only be partially accepted in terms of employment status.

Table 6.18
ANOVA: Agents – Key dimensions of Call Centre effectiveness and age respectively

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Age</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
</tr>
<tr>
<td>Human Resource</td>
<td>0.258</td>
<td>0.773</td>
</tr>
<tr>
<td>Technology</td>
<td>0.289</td>
<td>0.750</td>
</tr>
<tr>
<td>Customers</td>
<td>1.345</td>
<td>0.264</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>1.142</td>
<td>0.339</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.818</td>
<td>0.146</td>
</tr>
<tr>
<td></td>
<td>0.890</td>
<td>0.448</td>
</tr>
<tr>
<td></td>
<td>2.469</td>
<td>0.064</td>
</tr>
<tr>
<td></td>
<td>2.054</td>
<td>0.109</td>
</tr>
</tbody>
</table>

Table 6.18 indicates that agents varying in age and race do not differ significantly in the perceptions of the influence of any of the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) on call centre effectiveness respectively. Hence, hypothesis 4 may be rejected in terms of age and race.
Table 6.19
ANOVA: Agents – Key dimensions of Call Centre effectiveness and tenure

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Tenure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Human Resource</td>
<td>2.133</td>
</tr>
<tr>
<td>Technology</td>
<td>1.595</td>
</tr>
<tr>
<td>Customers</td>
<td>1.057</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>3.218</td>
</tr>
</tbody>
</table>

*p < 0.05

Table 6.19 reflects that agents varying in tenure differ significantly in their perceptions of Infrastructure/Sick Building Syndrome at the 5% level of significance. In order to assess exactly where the significant differences lie, the Post Hoc Scheffe’s test was conducted (Table 6.20).

Table 6.20
ANOVA: Tenure and sub-dimensions of Infrastructure/Sick Building Syndrome

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>151</td>
<td>3.426</td>
<td>0.68178</td>
<td>2.202</td>
<td>0.090</td>
</tr>
<tr>
<td>Ergonomic design</td>
<td>151</td>
<td>3.233</td>
<td>0.81696</td>
<td>2.402</td>
<td>0.070</td>
</tr>
<tr>
<td>Lighting and Ventilation</td>
<td>151</td>
<td>3.196</td>
<td>0.77926</td>
<td>2.336</td>
<td>0.076</td>
</tr>
<tr>
<td>Health and performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 month - 11 months</td>
<td>23</td>
<td>3.583</td>
<td>0.73833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>78</td>
<td>3.400</td>
<td>0.75730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 – 6 years</td>
<td>25</td>
<td>3.336</td>
<td>0.71815</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 years and over</td>
<td>25</td>
<td>2.792</td>
<td>0.65696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>3.317</td>
<td>0.76572</td>
<td>5.627</td>
<td>0.001**</td>
</tr>
<tr>
<td>Noise and aesthetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 month - 11 months</td>
<td>23</td>
<td>2.783</td>
<td>0.82333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>78</td>
<td>3.035</td>
<td>0.75240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 – 6 years</td>
<td>25</td>
<td>2.820</td>
<td>0.74134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 years and over</td>
<td>25</td>
<td>2.550</td>
<td>0.75346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>2.881</td>
<td>0.77558</td>
<td>2.820</td>
<td>0.041*</td>
</tr>
</tbody>
</table>

*p < 0.05

**p < 0.01

Table 6.20 indicates that agents varying in tenure differ significantly in their perceptions of the influence of infrastructure/sick building syndrome on their health and performance in
executing their jobs at the 1% level of significance. Furthermore, agents varying in tenure differ significantly in their perceptions of noise and aesthetics in the work environment at the 5% level of significance. Table 6.20 also indicates that tenure does not significantly influence agents’ perceptions of the other sub-dimensions of infrastructure/sick building syndrome. Hence, hypothesis 4 may only be partially accepted in terms of tenure. In order to assess exactly where the difference lies in terms of tenure and noise and aesthetics mean analyses were conducted (Table 6.20). Table 6.18 indicates that agents employed between 1-3 years (Mean = 3.035) are more convinced than those employed for 7 years and over (Mean = 2.550) that noise and aesthetics influence infrastructure/sick building syndrome.

In order to assess where the significant differences lie in terms of tenure and health and performance, the Post hoc Scheffe’s test was conducted (Table 6.21).

Table 6.21

<table>
<thead>
<tr>
<th>(I) Tenure</th>
<th>(J) Tenure</th>
<th>Mean</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>P</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 11 months</td>
<td>1 - 3 years</td>
<td>3.400</td>
<td>0.18261</td>
<td>0.17382</td>
<td>0.776</td>
<td>-0.3090</td>
</tr>
<tr>
<td></td>
<td>4-6 years</td>
<td>3.336</td>
<td>0.24661</td>
<td>0.21166</td>
<td>0.716</td>
<td>-0.3520</td>
</tr>
<tr>
<td></td>
<td>7 years +</td>
<td>2.792</td>
<td>0.79061*</td>
<td>0.21166</td>
<td>0.001</td>
<td>0.1920</td>
</tr>
</tbody>
</table>

Table 6.21 indicates that agents employed under 1 year (Mean = 3.583) have a stronger opinion that infrastructure/sick building syndrome negatively influences their health and performance than those employed for 7 years and over (Mean = 2.792).

Table 6.19 also indicates that tenure does not influence any of the other key dimensions (Human Resource, Technology and Customers) that have the potential to impact on call centre effectiveness respectively. Hence, hypothesis 4 may only be partially accepted in terms of tenure.
Table 6.22
ANOVA: Agents – Key dimensions of Call Centre effectiveness and education

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>1.343</td>
</tr>
<tr>
<td>Technology</td>
<td>0.950</td>
</tr>
<tr>
<td>Customers</td>
<td>1.283</td>
</tr>
<tr>
<td>Infrastructure/Sick Building Syndrome</td>
<td>3.460</td>
</tr>
</tbody>
</table>

* p < 0.05

Table 6.22 reflects that agents varying in education differ significantly in their perceptions of Infrastructure/Sick Building Syndrome at the 5% level of significance. In order to assess exactly where these significant differences lie, mean analyses and the Post Hoc Scheffe’s Test were conducted (Table 23).

Table 6.23
ANOVA: Educational qualification and sub-dimensions of Infrastructure/Sick Building syndrome

<table>
<thead>
<tr>
<th>Sub-dimension</th>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>85</td>
<td>3.468</td>
<td>0.66232</td>
<td>3.627</td>
<td>0.029*</td>
</tr>
<tr>
<td>High School</td>
<td>55</td>
<td>3.277</td>
<td>0.69000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>11</td>
<td>3.840</td>
<td>0.62523</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>3.426</td>
<td>0.68178</td>
<td>2.451</td>
<td>0.090</td>
</tr>
<tr>
<td>Ergonomic design</td>
<td>151</td>
<td>3.233</td>
<td>0.81696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting and Ventilation</td>
<td>151</td>
<td>3.196</td>
<td>0.77926</td>
<td>1.117</td>
<td>0.330</td>
</tr>
<tr>
<td>Health and Performance</td>
<td>151</td>
<td>3.317</td>
<td>0.76572</td>
<td>3.040</td>
<td>0.051</td>
</tr>
<tr>
<td>Noise and aesthetics</td>
<td>151</td>
<td>2.880</td>
<td>0.77558</td>
<td>2.719</td>
<td>0.069</td>
</tr>
</tbody>
</table>

*p < 0.05

Table 6.23 indicates that agents varying in educational qualification differ significantly in their perceptions of the layout of their workstation in executing their jobs at the 5% level of significance. Table 6.23 also indicates that educational qualification does not significantly influence agents’ perceptions of the other sub dimensions of infrastructure/sick building syndrome. Hence, hypothesis 4 may only be partially accepted in terms of educational...
qualification. In order to assess exactly where the significant differences lie in terms of educational qualification and layout, the Post hoc Scheffe’s test was conducted (Table 6.24).

### Table 6.24

**Post hoc Scheffe’s test: Educational Qualification and Layout**

<table>
<thead>
<tr>
<th>Layout (I)</th>
<th>Education (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>High school</td>
<td>0.37326</td>
<td>0.21473</td>
<td>0.224</td>
<td>-0.1577 0.6042</td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
<td>0.56364*</td>
<td>0.22134</td>
<td>0.042</td>
<td>0.0163 1.1110</td>
</tr>
</tbody>
</table>

Table 6.24 indicates that agent’s with a degree (Mean = 3.840) have a stronger opinion that layout influences infrastructure/sick building syndrome than agents’ with a diploma (Mean = 3.277).

Table 6.22 also indicates that education does not influence any of the other key dimensions (Human Resource, Technology and Customers) that have the potential to impact on call centre effectiveness respectively. Hence, hypothesis 4 may only be partially accepted in terms of tenure and education.

### 6.2.3.5 Influence of Biographical data: Customers

**Hypothesis 5:**

Customers varying in biographical profiles (gender, age, race, education) differ significantly in the perceptions of the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) having the potential to impact on call centre effectiveness respectively.

### Table 6.25

**t-test: Customers – Gender and the key dimensions of Call Centre effectiveness**

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resource</td>
<td>-0.967</td>
<td>218</td>
<td>0.334</td>
</tr>
<tr>
<td>Customer Service</td>
<td>-1.381</td>
<td>218</td>
<td>0.169</td>
</tr>
<tr>
<td>Technology</td>
<td>-1.549</td>
<td>218</td>
<td>0.123</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>-1.187</td>
<td>218</td>
<td>0.237</td>
</tr>
</tbody>
</table>
Table 6.25 indicates that male and female customers do not differ significantly in the perceptions of the influence of the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) on call centre effectiveness respectively. Hence, hypothesis 5 may be rejected in terms of gender.

<table>
<thead>
<tr>
<th>Key dimensions impacting on Call Centre Effectiveness</th>
<th>Age</th>
<th>Race</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>F</td>
</tr>
<tr>
<td>Human Resource</td>
<td>1.356</td>
<td>0.250</td>
<td>0.867</td>
</tr>
<tr>
<td>Customer Service</td>
<td>1.944</td>
<td>0.104</td>
<td>0.091</td>
</tr>
<tr>
<td>Technology</td>
<td>0.515</td>
<td>0.725</td>
<td>0.851</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>0.375</td>
<td>0.827</td>
<td>0.408</td>
</tr>
</tbody>
</table>

Table 6.26 indicates that customers varying in biographical profiles (age, race and education) do not differ significantly in the perceptions of the influence of the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) on call centre effectiveness respectively. Hence, hypothesis 5 may be rejected in terms of age, race and education.

Comparison of Agents’ and Customers’ biographical data on the perceptions of the key dimensions having the potential to impact on Call Centre Effectiveness

Overall, agents’ perceptions of the key dimensions’ and their sub-dimensions’ (human resources, technology, infrastructure/sick building syndrome, customers) respective potential to impact on call centre effectiveness is significantly influenced by agents’ gender, employment status, tenure and education respectively. However, customers’ perceptions of the key dimensions and their sub-dimensions (human resources, customer service, technology, infrastructure) are not influenced by their biographical profiles (gender, age, race, education) respectively.
6.2.3.6 Multiple Regression: Agents

Hypothesis 6

As perceived by agents, the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) significantly account for the variance in determining call centre effectiveness.

Table 6.27

Multiple Regression: Call Centre Effectiveness (Agents’ Perceptions)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.837\textsuperscript{a}</td>
<td>0.701</td>
<td>0.699</td>
<td>0.25639</td>
</tr>
<tr>
<td>2</td>
<td>0.931\textsuperscript{b}</td>
<td>0.867</td>
<td>0.865</td>
<td>0.17176</td>
</tr>
<tr>
<td>3</td>
<td>0.972\textsuperscript{c}</td>
<td>0.945</td>
<td>0.944</td>
<td>0.11028</td>
</tr>
<tr>
<td>4</td>
<td>1.000\textsuperscript{d}</td>
<td>1.000</td>
<td>1.000</td>
<td>0.00000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>8.507</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.837</td>
<td>18.696</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>6.435</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.649</td>
<td>19.610</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>0.449</td>
<td>13.565</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>6.089</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.443</td>
<td>17.399</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>0.365</td>
<td>16.609</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>0.377</td>
<td>14.561</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.317</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>0.347</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>0.344</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>Ease of communication between agent and customer</td>
<td>0.282</td>
<td>.</td>
</tr>
</tbody>
</table>

Table 6.27 indicates that the key dimensions account for 100% (Adjusted $R^2 = 1.000$) of the variance in determining call centre effectiveness. Table 6.27 also indicates that these dimensions impact on call centre effectiveness to varying degrees as indicated in the Beta values which are as follows:-

- Infrastructure/Sick Building Syndrome (Beta = 0.347)
- Technology (Beta = 0.344)
- Human Resource (Beta = 0.317)
- Customers (Beta = 0.282)

The results indicate that infrastructure/sick building syndrome (Beta = 0.347) followed by technology (Beta = 0.344), human resource (Beta = 0.317) and negligibly followed by customers (Beta = 0.282) are critical factors in enhancing the effectiveness of the call centre and if not considered will contribute to the ineffectiveness of call centre operations.

6.2.3.7 Multiple Regression: Customers

Hypothesis 7

As perceived by customers, the key dimensions (Human Resource, Customer Service, Technology and Infrastructure) significantly account for the variance in determining call centre effectiveness.
Table 6.28

Multiple Regression: Call Centre Effectiveness (Customers’ Perceptions)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.914&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.835</td>
<td>0.835</td>
<td>0.19627</td>
</tr>
<tr>
<td>2</td>
<td>0.967&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.936</td>
<td>0.935</td>
<td>0.12266</td>
</tr>
<tr>
<td>3</td>
<td>0.990&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.981</td>
<td>0.980</td>
<td>0.06746</td>
</tr>
<tr>
<td>4</td>
<td>1.000&lt;sup&gt;d&lt;/sup&gt;</td>
<td>1.000</td>
<td>1.000</td>
<td>0.00000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.914</td>
<td>23.451</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.577</td>
<td>33.266</td>
</tr>
<tr>
<td></td>
<td>Customer Services</td>
<td>0.462</td>
<td>23.059</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.407</td>
<td>11.740</td>
</tr>
<tr>
<td></td>
<td>Customer Services</td>
<td>0.389</td>
<td>23.059</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>0.312</td>
<td>23.059</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Resources</td>
<td>0.414</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Customer Services</td>
<td>0.304</td>
<td>1.081E8</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>0.286</td>
<td>8159662</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>0.170</td>
<td>8385766</td>
</tr>
</tbody>
</table>

Table 6.28 indicates that the key dimensions account for 100% (Adjusted $R^2 = 1.000$) of the variance in determining call centre effectiveness. Table 6.28 also indicates that these dimensions impact on call centre effectiveness to varying degrees as indicated in the Beta values which are as follows:-

- Human Resource (Beta = 0.414)
- Customer Service (Beta = 0.304)
- Infrastructure (Beta = 0.286)
- Technology (Beta = 0.170)
The results indicate that human resource (Beta = 0.414), followed by customer service (Beta = 0.304) and then negligibly followed by infrastructure (Beta = 0.286) and technology (Beta = 0.170) are critical factors in enhancing the effectiveness of the call centre and if not considered will contribute to the ineffectiveness of call centre operations.

**Comparison of Agents’ and Customers’ perceptions of the key dimensions significantly accounting for the variance in determining Call Centre Effectiveness**

Overall, agents placed greater emphasis on infrastructure/sick building syndrome and technology in bringing about call centre effectiveness and customers placed greater emphasis on human resource and customer service in evaluating call centre effectiveness.

6.3 **Statistical Analysis of the Questionnaire**

The psychometric properties of the questionnaires (validity and reliability) were statistically assessed.

6.3.1 **Validity**

The validity of the questionnaire for Agents was established using Factor Analysis. The adequacy of the sample for the computation of Factor Analysis was assessed using the Kaiser-Meyer-Olkin Measure of sampling adequacy (0.747) and Bartlett’s Test of Sphericity (8038.129; p = 0.000) which respectively indicated adequacy, suitability and significance (Table 6.20).

Table 6.29

**Factor Analysis: Kaiser Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity (Agents’ Questionnaire)**

<table>
<thead>
<tr>
<th></th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.747</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bartlett’s Test of Sphericity</strong></td>
<td>Approximate Chi-Square df Sig</td>
<td>8038.129</td>
</tr>
</tbody>
</table>

Table 6.29 presents the factor loadings for the dimensions influencing call centre effectiveness. Only those loadings which were greater than 0.4 were considered to be
significant. When an item loaded significantly on two factors only that with the higher loading was considered. Four factors with Eigenvalues greater than unity were generated (Table 6.30).
Table 6.30
Factor Analysis: Agents’ Perceptions of the dimensions influencing Call Centre Effectiveness

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>QD6</td>
<td>0.765</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD5</td>
<td>0.698</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD19</td>
<td>0.696</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD12</td>
<td>0.692</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD11</td>
<td>0.686</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD4</td>
<td>0.658</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD9</td>
<td>0.654</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QD16</td>
<td>0.646</td>
<td></td>
<td></td>
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Table 6.30
Factor Analysis: Agents’ Perceptions of the dimensions influencing Call Centre Effectiveness (continued)

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<td>0.402</td>
</tr>
<tr>
<td>QC7</td>
<td></td>
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</tr>
</tbody>
</table>

| Eigen- Value | 9.481 | 8.604 | 7.680 | 4.319 |
|-----------------------------------------------|
| % of Total Variance | 12 | 10.89 | 9.72 | 5.47 |

Table 6.30 indicates that 20 items load significantly on Factor 1 and account for 12% of the total variance. All the items relate to the influence of **Infrastructure/Sick Building**.
Syndrome on call centre effectiveness and hence, Factor 1 may be labeled likewise. These items relate to layout and style of the office, ergonomic design of workstation, lighting and ventilation, health and performance and noise and aesthetics on performance.

Table 6.30 indicates that 18 items load significantly on Factor 2 and account for 10.89% of the total variance. All 17 items relate to the influence of Human Resource on call centre effectiveness and incorporate issues of skills, knowledge, ability, attitude, performance; interpersonal skills; training and development; remuneration/motivation and teamwork. One item relates to the influence of Technology on call centre effectiveness and pertains to personal interaction versus self service. Since the majority of the items relate to the influence of Human Resource on call centre effectiveness, Factor 2 may be labeled as Human Resource.

Table 6.30 indicates that 15 items load significantly on Factor 3 and account for 9.72% of the total variance. Of the 15 items, 10 items relate to the influence of Human Resource on call centre effectiveness and incorporate issues of skills, knowledge, ability, attitude, performance; interpersonal skills; training and development; remuneration/motivation and teamwork. A further 3 items relate to the influence of Customers on call centre effectiveness and pertains to the ease of communication between agents and customers and finally, 2 items relate to the influence of Technology on call centre effectiveness and pertains to system’s understanding and ease of use. Since the majority of the items relate to the influence of Human resource on call centre effectiveness, Factor 3 may be labeled as Human Resource.

Table 6.30 indicates that 7 items load significantly on Factor 4 and account for 5.47% of the total variance. Of the 7 items, 4 items relate to the influence of Technology on call centre effectiveness and pertains to system’s understanding/ease of use and personal interaction versus self service; 1 item relates to the influence of Human Resource on call centre effectiveness and pertains to training and development; 1 item relates to the influence of Infrastructure/Sick Building Syndrome and pertains to layout style of office and finally, 1 item relates to the influence of Customers on call centre effectiveness and pertains to the
ease of communication between agents and customers. Since the majority of items relate to the influence of Technology on call centre effectiveness, Factor 4 may be labeled as Technology.

From the results in Table 6.30 reflecting agents’ perceptions of the dimensions influencing call centre effectiveness, it is evident that 2 Factors were labeled as Human Resource but none of the factors could be identified as customers. Being agents’ perceptions, it is clear that agents viewed customers and their ease of communication with them from a Human Resource perspective in terms of skills, knowledge, ability, attitude, performance; interpersonal skills; training and development; remuneration/motivation and teamwork.

The validity of the questionnaire for Customers was established using Factor Analysis. The adequacy of the sample for the computation of Factor Analysis was assessed using the Kaiser-Meyer-Olkin Measure of sampling adequacy (0.904) and Bartlett’s Test of Sphericity (7298.498; p = 0.000) which respectively indicated adequacy, suitability and significance (Table 6.31).

**Table 6.31**

**Factor Analysis: Kaiser Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity (Customers’ Questionnaire)**

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>0.904</th>
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<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approximate Chi-Square</td>
</tr>
<tr>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>Sig</td>
</tr>
</tbody>
</table>

Table 6.31 presents the factor loadings for the dimensions influencing call centre effectiveness. Only those loadings which were greater than 0.4 were considered to be significant. When an item loaded significantly on two factors only that with the higher loading was considered. Four factors with Eigenvalues greater than unity were generated (Table 6.32).
Table 6.32
Factor Analysis: Customers’ Perceptions of the dimensions influencing Call Centre Effectiveness

<table>
<thead>
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<th>Component</th>
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<th>4</th>
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Table 6.32
Factor Analysis: Customers’ Perceptions of the dimensions influencing Call Centre Effectiveness (continued)

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<td>5.37</td>
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</table>

Table 6.32 indicates that 28 items load significantly on Factor 1 and account for 27.23% of the total variance. Thirteen items relate to the influence of Customer Service on call centre effectiveness and pertain to delivery of service, service excellence, service retention and loyalty. Ten items relate to the influence of Human Resource on call centre effectiveness and incorporate issues of skills, knowledge, ability, attitude; interpersonal skills and training and development. Four items relate to the influence of Infrastructure on call centre effectiveness and pertain to waiting lines and ease of communication and one item relates to the influence of Technology on call centre effectiveness and pertains to system’s efficiency. Since the majority of the items relate to the influence of Customer Service on call centre effectiveness, Factor 1 may be labeled likewise.
Table 6.32 indicates that 10 items load significantly on Factor 2 and account for 11.16% of the total variance. All of the items relate to the influence of Technology on call centre effectiveness and incorporate issues of system’s efficiency, ease of use and clarity. Hence, Factor 2 may be labeled likewise.

Table 6.32 indicates that 5 items load significantly on Factor 3 and account for 5.37% of the total variance. All of the items relate to the influence of Customer Service on call centre effectiveness and relate to delivery of service, service retention and loyalty. Hence, Factor 3 may be labeled likewise.

Table 6.32 indicates that 3 items load significantly on Factor 4 and account for 4.67% of the total variance. All of the items relate to the influence of Infrastructure on call centre effectiveness and relate to the ease of communication. Hence, Factor 4 may be labeled likewise.

From the results in Table 6.32 reflecting customers’ perceptions of the dimensions influencing call centre effectiveness, it is evident that 2 Factors were labeled as Customer Service but none of the factors could be identified as Human Resources. Being customers’ perceptions, it is clear that customers viewed customer service in terms of delivery of service, service excellence, service retention and loyalty.

6.3.2 Reliability

The reliability of the questionnaire for agents was assessed using Cronbach’s Coefficient Alpha (Table 6.33).

<table>
<thead>
<tr>
<th>Table 6.33</th>
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</thead>
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<td>Reliability of Agents’ Questionnaire: Cronbach’s Coefficient Alpha</td>
</tr>
<tr>
<td>Cronbach’s Coefficient Alpha</td>
</tr>
</tbody>
</table>
Table 6.33 indicates that the items in the agents’ questionnaire have a high degree of internal consistency (Cronbach’s Alpha = 0.948). Item reliabilities range from 0.946 to 0.948, thereby confirming the inter-item consistency of the questionnaire.

Item reliabilities for each of the dimensions separately that have the potential to impact on call centre effectiveness were also assessed (Table 6.34 – 6.37).
## Table 6.34

Cronbach’s Coefficient Alpha: Human Resource dimension on Agents’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
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<td>0.474</td>
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</tr>
<tr>
<td>QB12</td>
<td>113.79</td>
<td>327.195</td>
<td>0.401</td>
<td>0.924</td>
</tr>
<tr>
<td>QB13</td>
<td>114.06</td>
<td>319.283</td>
<td>0.511</td>
<td>0.923</td>
</tr>
<tr>
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<td>113.30</td>
<td>326.531</td>
<td>0.478</td>
<td>0.923</td>
</tr>
<tr>
<td>QB15</td>
<td>113.34</td>
<td>324.361</td>
<td>0.591</td>
<td>0.922</td>
</tr>
<tr>
<td>QB16</td>
<td>114.42</td>
<td>323.938</td>
<td>0.399</td>
<td>0.925</td>
</tr>
<tr>
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<td>113.70</td>
<td>330.877</td>
<td>0.283</td>
<td>0.926</td>
</tr>
<tr>
<td>QB18</td>
<td>113.42</td>
<td>327.806</td>
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</tr>
<tr>
<td>QB19</td>
<td>115.18</td>
<td>322.121</td>
<td>0.419</td>
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</tr>
<tr>
<td>QB20</td>
<td>114.89</td>
<td>318.821</td>
<td>0.525</td>
<td>0.923</td>
</tr>
<tr>
<td>QB21</td>
<td>114.17</td>
<td>323.859</td>
<td>0.462</td>
<td>0.924</td>
</tr>
<tr>
<td>QB22</td>
<td>113.82</td>
<td>326.414</td>
<td>0.421</td>
<td>0.924</td>
</tr>
<tr>
<td>QB23</td>
<td>113.93</td>
<td>323.615</td>
<td>0.443</td>
<td>0.924</td>
</tr>
<tr>
<td>QB24</td>
<td>113.70</td>
<td>323.917</td>
<td>0.529</td>
<td>0.923</td>
</tr>
<tr>
<td>QB25</td>
<td>114.16</td>
<td>315.028</td>
<td>0.668</td>
<td>0.921</td>
</tr>
<tr>
<td>QB26</td>
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<td>311.678</td>
<td>0.701</td>
<td>0.920</td>
</tr>
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<td>314.756</td>
<td>0.579</td>
<td>0.922</td>
</tr>
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<td>320.019</td>
<td>0.575</td>
<td>0.922</td>
</tr>
<tr>
<td>QB29</td>
<td>113.72</td>
<td>323.949</td>
<td>0.506</td>
<td>0.923</td>
</tr>
<tr>
<td>QB30</td>
<td>113.38</td>
<td>329.743</td>
<td>0.424</td>
<td>0.924</td>
</tr>
<tr>
<td>QB31</td>
<td>114.11</td>
<td>322.407</td>
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<td>0.923</td>
</tr>
<tr>
<td>QB32</td>
<td>113.68</td>
<td>325.965</td>
<td>0.509</td>
<td>0.923</td>
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<table>
<thead>
<tr>
<th>Overall Cronbach's Coefficient Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.925</td>
<td>32</td>
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</tbody>
</table>
Table 6.34 reflects that the items indicating agents’ perceptions of the influence of Human Resource on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.925). This is confirmed by the high item reliabilities which range from 0.920 to 0.926.

Table 6.35

Cronbach’s Coefficient Alpha: Technology dimension on Agents’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC1</td>
<td>39.67</td>
<td>53.410</td>
<td>0.468</td>
<td>0.833</td>
</tr>
<tr>
<td>QC2</td>
<td>39.74</td>
<td>52.649</td>
<td>0.543</td>
<td>0.828</td>
</tr>
<tr>
<td>QC3</td>
<td>40.07</td>
<td>50.988</td>
<td>0.505</td>
<td>0.829</td>
</tr>
<tr>
<td>QC4</td>
<td>39.83</td>
<td>52.290</td>
<td>0.544</td>
<td>0.828</td>
</tr>
<tr>
<td>QC5</td>
<td>39.96</td>
<td>51.332</td>
<td>0.541</td>
<td>0.827</td>
</tr>
<tr>
<td>QC6</td>
<td>40.44</td>
<td>49.274</td>
<td>0.560</td>
<td>0.825</td>
</tr>
<tr>
<td>QC7</td>
<td>40.63</td>
<td>48.862</td>
<td>0.554</td>
<td>0.825</td>
</tr>
<tr>
<td>QC8</td>
<td>40.28</td>
<td>50.605</td>
<td>0.481</td>
<td>0.831</td>
</tr>
<tr>
<td>QC9</td>
<td>40.82</td>
<td>48.774</td>
<td>0.540</td>
<td>0.827</td>
</tr>
<tr>
<td>QC10</td>
<td>40.99</td>
<td>48.780</td>
<td>0.552</td>
<td>0.826</td>
</tr>
<tr>
<td>QC11</td>
<td>41.08</td>
<td>49.620</td>
<td>0.508</td>
<td>0.829</td>
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<tr>
<td>QC12</td>
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<td>0.334</td>
<td>0.842</td>
</tr>
</tbody>
</table>

Overall Cronbach's Coefficient Alpha 0.841  N of Items 12

Table 6.35 reflects that the items indicating agents’ perceptions of the influence of Technology on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.841). This is confirmed by the high item reliabilities which range from 0.825 to 0.842.
Table 6.36
Cronbach’s Coefficient Alpha: Infrastructure/Sick Building Syndrome dimension on Agents’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QD1</td>
<td>76.40</td>
<td>256.041</td>
<td>0.393</td>
<td>0.915</td>
</tr>
<tr>
<td>QD2</td>
<td>76.72</td>
<td>261.085</td>
<td>0.221</td>
<td>0.919</td>
</tr>
<tr>
<td>QD3</td>
<td>76.44</td>
<td>249.661</td>
<td>0.573</td>
<td>0.912</td>
</tr>
<tr>
<td>QD4</td>
<td>76.70</td>
<td>246.371</td>
<td>0.620</td>
<td>0.911</td>
</tr>
<tr>
<td>QD5</td>
<td>76.57</td>
<td>246.500</td>
<td>0.638</td>
<td>0.911</td>
</tr>
<tr>
<td>QD6</td>
<td>76.90</td>
<td>243.317</td>
<td>0.698</td>
<td>0.910</td>
</tr>
<tr>
<td>QD7</td>
<td>77.48</td>
<td>250.691</td>
<td>0.494</td>
<td>0.914</td>
</tr>
<tr>
<td>QD8</td>
<td>77.09</td>
<td>248.725</td>
<td>0.531</td>
<td>0.913</td>
</tr>
<tr>
<td>QD9</td>
<td>77.04</td>
<td>248.452</td>
<td>0.607</td>
<td>0.912</td>
</tr>
<tr>
<td>QD10</td>
<td>76.89</td>
<td>251.375</td>
<td>0.563</td>
<td>0.913</td>
</tr>
<tr>
<td>QD11</td>
<td>76.89</td>
<td>248.149</td>
<td>0.666</td>
<td>0.911</td>
</tr>
<tr>
<td>QD12</td>
<td>77.02</td>
<td>246.873</td>
<td>0.642</td>
<td>0.911</td>
</tr>
<tr>
<td>QD13</td>
<td>76.56</td>
<td>248.328</td>
<td>0.551</td>
<td>0.913</td>
</tr>
<tr>
<td>QD14</td>
<td>77.03</td>
<td>257.606</td>
<td>0.318</td>
<td>0.917</td>
</tr>
<tr>
<td>QD15</td>
<td>77.54</td>
<td>249.076</td>
<td>0.534</td>
<td>0.913</td>
</tr>
<tr>
<td>QD16</td>
<td>77.01</td>
<td>247.673</td>
<td>0.623</td>
<td>0.911</td>
</tr>
<tr>
<td>QD17</td>
<td>76.87</td>
<td>254.977</td>
<td>0.377</td>
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</tr>
<tr>
<td>QD18</td>
<td>77.11</td>
<td>248.069</td>
<td>0.572</td>
<td>0.912</td>
</tr>
<tr>
<td>QD19</td>
<td>77.00</td>
<td>244.093</td>
<td>0.689</td>
<td>0.910</td>
</tr>
<tr>
<td>QD20</td>
<td>76.84</td>
<td>247.828</td>
<td>0.608</td>
<td>0.912</td>
</tr>
<tr>
<td>QD21</td>
<td>76.25</td>
<td>256.243</td>
<td>0.401</td>
<td>0.915</td>
</tr>
<tr>
<td>QD22</td>
<td>76.95</td>
<td>254.277</td>
<td>0.424</td>
<td>0.915</td>
</tr>
<tr>
<td>QD23</td>
<td>77.07</td>
<td>250.001</td>
<td>0.594</td>
<td>0.912</td>
</tr>
<tr>
<td>QD24</td>
<td>77.43</td>
<td>248.753</td>
<td>0.601</td>
<td>0.912</td>
</tr>
<tr>
<td>QD25</td>
<td>77.70</td>
<td>256.013</td>
<td>0.327</td>
<td>0.917</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Cronbach's Coefficient Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.916</td>
<td>25</td>
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</tbody>
</table>

Table 6.36 reflects that the items indicating agents’ perceptions of the influence of Infrastructure/Sick Building Syndrome on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.916). This is confirmed by the high item reliabilities which range from 0.910 to 0.919.
Table 6.37
Cronbach’s Coefficient Alpha: Customers dimension on Agents’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QE1</td>
<td>32.58</td>
<td>24.551</td>
<td>0.166</td>
<td>0.710</td>
</tr>
<tr>
<td>QE2</td>
<td>31.13</td>
<td>23.982</td>
<td>0.262</td>
<td>0.689</td>
</tr>
<tr>
<td>QE3</td>
<td>31.03</td>
<td>22.519</td>
<td>0.550</td>
<td>0.642</td>
</tr>
<tr>
<td>QE4</td>
<td>30.85</td>
<td>23.219</td>
<td>0.463</td>
<td>0.656</td>
</tr>
<tr>
<td>QE5</td>
<td>31.34</td>
<td>21.945</td>
<td>0.530</td>
<td>0.640</td>
</tr>
<tr>
<td>QE6</td>
<td>31.50</td>
<td>23.038</td>
<td>0.441</td>
<td>0.658</td>
</tr>
<tr>
<td>QE7</td>
<td>31.38</td>
<td>24.450</td>
<td>0.236</td>
<td>0.692</td>
</tr>
<tr>
<td>QE8</td>
<td>30.73</td>
<td>24.492</td>
<td>0.290</td>
<td>0.682</td>
</tr>
<tr>
<td>QE9</td>
<td>31.64</td>
<td>22.125</td>
<td>0.399</td>
<td>0.663</td>
</tr>
<tr>
<td>QE10</td>
<td>31.15</td>
<td>22.983</td>
<td>0.317</td>
<td>0.680</td>
</tr>
</tbody>
</table>

Overall Cronbach's Coefficient Alpha: 0.695

Table 6.37 reflects that the items indicating agents’ perceptions of the influence of Customers on call centre effectiveness have a fair to good level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.695). This is confirmed by the acceptable item reliabilities which range from 0.640 to 0.710.

The reliability of the questionnaire for customers was assessed using Cronbach’s Coefficient Alpha (Table 6.38).

Table 6.38
Reliability of Customers’ Questionnaire: Cronbach’s Coefficient Alpha

| Cronbach’s Alpha | 0.945 |

Table 6.38 indicates that the items in the customers’ questionnaire have a high degree of internal consistency (Cronbach’s Alpha = 0.945). Item reliabilities range from 0.943 to 0.947, thereby confirming the inter-item consistency of the questionnaire.
Item reliabilities for each of the dimensions separately that have the potential to impact on call centre effectiveness were also assessed (Table 6.39 – 6.42).

Table 6.39
Cronbach’s Coefficient Alpha: Human Resource dimension on Customers’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
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<td>22.85</td>
<td>51.964</td>
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<td>0.920</td>
</tr>
<tr>
<td>QB2</td>
<td>23.22</td>
<td>50.000</td>
<td>0.837</td>
<td>0.913</td>
</tr>
<tr>
<td>QB3</td>
<td>23.30</td>
<td>50.240</td>
<td>0.822</td>
<td>0.914</td>
</tr>
<tr>
<td>QB4</td>
<td>23.10</td>
<td>51.300</td>
<td>0.752</td>
<td>0.918</td>
</tr>
<tr>
<td>QB5</td>
<td>23.10</td>
<td>50.816</td>
<td>0.809</td>
<td>0.915</td>
</tr>
<tr>
<td>QB6</td>
<td>22.97</td>
<td>52.579</td>
<td>0.652</td>
<td>0.923</td>
</tr>
<tr>
<td>QB7</td>
<td>23.22</td>
<td>50.400</td>
<td>0.837</td>
<td>0.913</td>
</tr>
<tr>
<td>QB8</td>
<td>23.12</td>
<td>53.487</td>
<td>0.501</td>
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</tr>
<tr>
<td>QB9</td>
<td>23.91</td>
<td>53.279</td>
<td>0.674</td>
<td>0.922</td>
</tr>
<tr>
<td>QB10</td>
<td>23.64</td>
<td>53.519</td>
<td>0.634</td>
<td>0.924</td>
</tr>
</tbody>
</table>

Table 6.39 reflects that the items indicating customers’ perceptions of the influence of Human Resource on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.927). This is confirmed by the high item reliabilities which range from 0.913 to 0.924.
Table 6.40
Cronbach’s Coefficient Alpha: Customer Service dimension on Customers’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC1</td>
<td>50.48</td>
<td>116.820</td>
<td>0.379</td>
<td>0.888</td>
</tr>
<tr>
<td>QC2</td>
<td>51.15</td>
<td>114.043</td>
<td>0.662</td>
<td>0.878</td>
</tr>
<tr>
<td>QC3</td>
<td>51.18</td>
<td>113.560</td>
<td>0.663</td>
<td>0.878</td>
</tr>
<tr>
<td>QC4</td>
<td>51.29</td>
<td>111.722</td>
<td>0.622</td>
<td>0.879</td>
</tr>
<tr>
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<td>50.64</td>
<td>115.810</td>
<td>0.469</td>
<td>0.884</td>
</tr>
<tr>
<td>QC6</td>
<td>51.30</td>
<td>112.817</td>
<td>0.690</td>
<td>0.877</td>
</tr>
<tr>
<td>QC7</td>
<td>51.38</td>
<td>112.622</td>
<td>0.689</td>
<td>0.877</td>
</tr>
<tr>
<td>QC8</td>
<td>50.25</td>
<td>122.976</td>
<td>0.212</td>
<td>0.892</td>
</tr>
<tr>
<td>QC9</td>
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<td>126.961</td>
<td>0.043</td>
<td>0.896</td>
</tr>
<tr>
<td>QC10</td>
<td>50.76</td>
<td>116.882</td>
<td>0.444</td>
<td>0.885</td>
</tr>
<tr>
<td>QC11</td>
<td>50.84</td>
<td>115.753</td>
<td>0.490</td>
<td>0.883</td>
</tr>
<tr>
<td>QC12</td>
<td>49.81</td>
<td>121.079</td>
<td>0.297</td>
<td>0.889</td>
</tr>
<tr>
<td>QC13</td>
<td>50.49</td>
<td>124.013</td>
<td>0.133</td>
<td>0.896</td>
</tr>
<tr>
<td>QC14</td>
<td>51.14</td>
<td>113.220</td>
<td>0.708</td>
<td>0.877</td>
</tr>
<tr>
<td>QC15</td>
<td>51.53</td>
<td>116.709</td>
<td>0.532</td>
<td>0.882</td>
</tr>
<tr>
<td>QC16</td>
<td>51.20</td>
<td>113.397</td>
<td>0.692</td>
<td>0.877</td>
</tr>
<tr>
<td>QC17</td>
<td>51.36</td>
<td>113.232</td>
<td>0.741</td>
<td>0.876</td>
</tr>
<tr>
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<td>0.726</td>
<td>0.876</td>
</tr>
<tr>
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<td>51.45</td>
<td>113.148</td>
<td>0.702</td>
<td>0.877</td>
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</table>

Overall Cronbach’s Coefficient Alpha | 0.888 | N of Items | 19

Table 6.40 reflects that the items indicating customers’ perceptions of the influence of Customer Service on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.888). This is confirmed by the high item reliabilities which range from 0.876 to 0.896.
Table 6.41

Cronbach’s Coefficient Alpha: Technology dimension on Customers’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
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<td>39.00</td>
<td>50.087</td>
<td>0.574</td>
<td>0.823</td>
</tr>
<tr>
<td>QD2</td>
<td>38.89</td>
<td>49.732</td>
<td>0.644</td>
<td>0.818</td>
</tr>
<tr>
<td>QD3</td>
<td>38.98</td>
<td>49.735</td>
<td>0.645</td>
<td>0.818</td>
</tr>
<tr>
<td>QD4</td>
<td>39.30</td>
<td>51.289</td>
<td>0.497</td>
<td>0.828</td>
</tr>
<tr>
<td>QD5</td>
<td>38.82</td>
<td>48.959</td>
<td>0.660</td>
<td>0.816</td>
</tr>
<tr>
<td>QD6</td>
<td>38.67</td>
<td>49.555</td>
<td>0.649</td>
<td>0.818</td>
</tr>
<tr>
<td>QD7</td>
<td>38.53</td>
<td>53.711</td>
<td>0.362</td>
<td>0.837</td>
</tr>
<tr>
<td>QD8</td>
<td>38.71</td>
<td>51.467</td>
<td>0.641</td>
<td>0.821</td>
</tr>
<tr>
<td>QD9</td>
<td>38.64</td>
<td>50.569</td>
<td>0.720</td>
<td>0.816</td>
</tr>
<tr>
<td>QD10</td>
<td>38.65</td>
<td>49.918</td>
<td>0.710</td>
<td>0.815</td>
</tr>
<tr>
<td>QD11</td>
<td>38.71</td>
<td>55.621</td>
<td>0.257</td>
<td>0.842</td>
</tr>
<tr>
<td>QD12</td>
<td>38.89</td>
<td>54.960</td>
<td>0.358</td>
<td>0.836</td>
</tr>
<tr>
<td>QD13</td>
<td>38.33</td>
<td>57.262</td>
<td>0.064</td>
<td>0.860</td>
</tr>
<tr>
<td>QD14</td>
<td>39.45</td>
<td>57.636</td>
<td>0.080</td>
<td>0.854</td>
</tr>
</tbody>
</table>

Overall Cronbach's Coefficient Alpha | N of Items
-----------------------------------|----------
0.840                               | 14       

Table 6.41 reflects that the items indicating customers’ perceptions of the influence of Technology on call centre effectiveness have a high level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.840). This is confirmed by the high item reliabilities which range from 0.815 to 0.860.
Table 6.42

Cronbach’s Coefficient Alpha: Infrastructure dimension on Customers’ Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>QE1</td>
<td>19.62</td>
<td>15.962</td>
<td>0.298</td>
<td>0.721</td>
</tr>
<tr>
<td>QE2</td>
<td>19.49</td>
<td>14.863</td>
<td>0.528</td>
<td>0.668</td>
</tr>
<tr>
<td>QE3</td>
<td>19.20</td>
<td>17.914</td>
<td>0.147</td>
<td>0.741</td>
</tr>
<tr>
<td>QE4</td>
<td>19.18</td>
<td>14.895</td>
<td>0.584</td>
<td>0.659</td>
</tr>
<tr>
<td>QE5</td>
<td>19.19</td>
<td>14.429</td>
<td>0.626</td>
<td>0.648</td>
</tr>
<tr>
<td>QE6</td>
<td>18.87</td>
<td>16.243</td>
<td>0.383</td>
<td>0.699</td>
</tr>
<tr>
<td>QE7</td>
<td>18.60</td>
<td>16.132</td>
<td>0.381</td>
<td>0.700</td>
</tr>
<tr>
<td>QE8</td>
<td>18.75</td>
<td>15.414</td>
<td>0.397</td>
<td>0.697</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Cronbach's Coefficient Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.721</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 6.42 reflects that the items indicating customers’ perceptions of the influence of Infrastructure on call centre effectiveness have a good level of inter-item consistency (Cronbach’s Coefficient Alpha = 0.721). This is confirmed by the acceptable item reliabilities which range from 0.648 to 0.741.

6.4 Conclusion

This chapter focused on the presentation and interpretation of the research results, from the perspective of both agents and customers, using descriptive and inferential statistics. Additionally, the psychometric properties of the questionnaires in terms of the validity and reliability were also assessed.

The results from the descriptive statistics indicate that respondents (both agents and customers) indicate a low level of satisfaction and perceived positive influence of each of the four key dimensions on call centre effectiveness. In order to assess the areas for improvement further analyses was conducted for each of the sub-dimensions of the four main dimensions influencing call centre effectiveness.
Inferential statistics was conducted to test the relationships and differences associated with the key dimensions of the study (Human Resource, Technology, Infrastructure and Customer Service) as well as the impact of the different categories of biographical data on the key dimensions of the study. Overall, agents’ perceptions of the key dimensions and their sub-dimensions (Human Resources, Technology, Infrastructure/Sick Building Syndrome, customers) and its respective potential to impact on call centre effectiveness is significantly influenced by agents’ gender, employment status, tenure and education respectively. However, customers’ perceptions of the key dimensions and their sub-dimensions (Human Resources, Customer Service, Technology, Infrastructure) are not influenced by their biographical profiles (gender, age, race, education) respectively.

In this chapter, the results generated were presented in tabular and graphical form. These findings will be enhanced when compared and contrasted with the work of other research experts in the field of this study (Chapter 7).
CHAPTER SEVEN
Discussion of Results

7.1 Introduction
Within the service environment, call centres are being used to fulfill the three main business roles of telemarketing, credit and collection and, customer service and support (Armistead, Kiely, Hole & Prescott, 2002). Call centres play a strategic role within service companies ranging from simple customer information to complicated customer service functions (Armistead et al., 2002).

Research within the past decade has intensified as a result of the significant growth in call centres which employs a large part of the population. The face of customer service has evolved with customers now being encouraged to become actively involved in the process of service delivery thereby enhancing service quality and increased service productivity (Eisengerich & Bell, 2006). This will undoubtedly also assist in building customer loyalty and build and strengthen relationships (Donaldson & Toole, 2002).

This study explores the effectiveness of the call centre in managing customers and their needs from both the agents’ and customers’ perspectives. As with most jobs, there are always work pressures and within a call centre pressures come from balancing conflicting demands of surveillance, satisfying customer needs and motivating employees (Kinnie, Hutchinson & Purcell, 2000).

The Department of Public Service and Administration (2001) stresses “Batho Pele” which is one of the eight principles that focuses on the need for courtesy by staff in interacting with customers. This principle also stresses the importance of setting service standard principles and the need to include customers in the process in order to establish acceptable service delivery benchmarks. This was a public sector organisation operating under monopolistic conditions.
This chapter provides a discussion of the findings of this study which incorporates some of the issues mentioned above. The researcher will compare and contrast the findings of the study with research undertaken by other researchers in the field in order to enhance the meaningfulness of the findings.

7.2 Perceptions of the influence of the key dimensions on Call Centre Effectiveness

Agents’ perceptions of the influence of the key dimensions on Call Centre Effectiveness will be discussed first and then customers’ perceptions will follow. A comparison of the two perspectives will also be presented.

7.2.1 Agents’ Perceptions

Agents’ perceptions of the influence of the four key dimensions on call centre effectiveness are discussed.

7.2.1.1 Agents’ Perceptions of Human Resource and Call Centre Effectiveness

The results of the study displayed that overall the agents’ perceptions of the influence of the key dimension of Human Resource on call centre effectiveness indicates only a moderate level of satisfaction and perceived positive influence (Mean = 3.6203). These findings were based on agents’ perceptions of skills, knowledge ability, attitude and performance; interpersonal skills; training and development; remuneration/motivation and teamwork that make up their perceptions of the influence of Human Resource on call centre effectiveness.

In terms of the sub-dimension of skills, knowledge, ability, attitude and performance of call centre agents, the study found that agents did not agree that they had complete authority to make decisions to satisfy customer complaints. Agents also reported that mental exhaustion and physical strain hindered their communication with customers. The finding was supported by research conducted by Armistead et al., (2002) who reported that agents understand the strong need by management to monitor time pressures and the tightly controlled nature of the work undertaken. However, the workload was found to be tiring and uneven and caused their energy to wane as the shift proceeded. The finding is also supported by Heathfield (2012) who concluded that employee empowerment is a great tool and strategy for accomplishing work, customer service and employee motivation. Contrary to
these findings, Reference for Business (2012) postulated that some employees have no desire to make work related decisions; hence, the success of empowerment and authority to make decisions depends on employees’ willingness to participate in decision-making.

In terms of the sub-dimensions of interpersonal skills of call centre agents and call centre effectiveness, the study found that agents were not comfortable enough informing supervisors when they felt they were not coping with the work pressures. Research by Grandey, Dickter & Sin (2004) found that customer service providers are typically subordinate to their consumers, their interactions with members of the public tend to be routine and scripted, constraining opportunities for personal expression. SAB Miller has instituted an Internal Management Process (IMP) which allows call centre agents to meet managers on a monthly basis to discuss performance and annual performance reviews (Best Employer SA, 2008). Employees should always feel comfortable to let management know if they are not coping (Best Employer SA, 2008; Brown, 2007; Cavitt, 2010; Snow, 2007).

In the current study, it was noted that agents reported that they were uncomfortable using pre-prepared telephone scripts when taking a call. Research found that it is essential for all call centre agents to work out a telephone script which they can use to answer the phone, welcome a caller, enquire what the problem is or direct the call to a specific person (Deery, Iverson & Walsh, 2002; Theron et al., 2003). However, Kahn (1990) which found that people can disengage themselves by performing tasks at some distance from their preferred selves. They opt to perform roles as scripts indicate they should, and they become physically uninvolved, cognitively unvigilant and emotionally disconnected and do not question others’ decisions. Furthermore, Reference for Business (2012) cautions that although telemarketing is cost effective and easier to execute because the entire dialogue is scripted, the human element in customer relationships is critical in making the effort successful, suggesting that scripts are not always successful in resolving customer queries.

In terms of the sub-dimension of training and development of call centre agents and call centre effectiveness, the study reported that agents found that their jobs were not fulfilling in terms of opportunities for growth and advancement and that they further disagreed that they
were provided with comprehensive training manuals and information to be able to assist them in handling complaints and queries efficiently. This finding is supported by the work of Frenkel, Tam, Korczynski & Shire (1998) who found that training for job proficiency and meeting standards of customer service takes precedence over training for career development. Thompson, Callaghan & Van Den Brock (2004) also concur that work in the call centre is stressful due to high performance standards demanded, there are fewer training and development opportunities and if training is undertaken it is usually used as a form of control. Call centre work is characterized as being monotonous as therefore lacks career opportunities (Garavan et al., 2008). However, contrary to these views, McLuhan (1998) found that a combination of human resource strategies embracing motivation, reward systems, training and development and career progression has helped in the transformation of the call centres into environments which have no difficulty in attracting and retaining staff.

In terms of the sub-dimension of remuneration and motivation of call centre agents and call centre effectiveness, the study found that agents were displeased with the rewards and recognition that they received when they performed well. Agents also believed that management did not always give its staff incentives to motivate them to work harder and many agents believed that the salaries that they earned were not market related. In this regard, Wallace, Eagleson & Waldensee (2000) discovered that recruitment of highly motivated employees meant that the organisation did not have to invest skill and time to develop their skills. When their motivation was depleted, they were encouraged to leave and were replaced with new, fresh and motivated agents. Furthermore, Mahesh & Kasturi (2006) emphasized that reward and recognition from external sources is critical to improving agent’s performance. Armistead et al. (2002) found that salary was the best aspect of the agent’s job followed by people contact.

In terms of the final sub-dimension of teamwork amongst the call centre agents and call centre effectiveness, the study found that agents disagreed that the leader/manager used effective techniques to encourage high achievement. They also disagreed that they were provided with continuous feedback to help improve their job performance. Similar findings
were obtained by Thompson & Wallace (1996) who noted that due to strict control measures enforced in the call centre; management strongly enforces decisions and channels information downwards, suggesting that team members have little impact on team management or on organisation of work. This happens despite the finding that teamwork is important to agents and enabled improvements in work performance (Armistead et al., 2002). Furthermore, team leaders and supervisors play a vital role in managing the performance of agents.

7.2.1.2 Agents’ Perceptions of Technology on Call Centre Effectiveness
The results of the study reflected that overall the agents’ perception of the influence of the key dimension of Technology on call centre effectiveness indicates a moderate level of satisfaction and perceived positive influence (Mean = 3.6656). These findings were based on agents’ perceptions of systems understanding/ease of use and personal interaction versus self service that make up their perceptions of the influence of Technology on call centre effectiveness.

In terms of the sub-dimension of systems understanding/ease of use, the study found that agents did not always deal with electronic queries/complaints within 24 hours of receiving them. In a similar study, Seddon (2001) found that resolution at the first point-of-contact in call centers varied but was never higher than 65 percent and was as low as 21 percent in financial services organisations. Gettys (2007) found that the majority of calls could not be resolved on the first call and required some research by agents taking longer than 24 hours.

In the current study, it was also found that call centre agents disagreed that the software was fast and reliable. However, Jack, Bedics & McCary (2006) believe that technology allowed firms to automate many time consuming and labour intensive processes. According to Totty (2004), call centres continue to adopt new technologies such as internet access with web pages for self-help service, email interaction and support, instant messaging support and skills based routing which assists with operations and customer satisfaction.
In terms of the sub-dimension of personal interaction versus self-service, the study found that agents disagreed that web-based e-services are more effective for addressing customer needs than talking to agents. The agents also disagreed that web-based communication facilitates interaction between the firm and the customer better than an agent can. Similarly, Budhwar, Varma, Malhotra & Mukherjee (2009) in their study on call centres operating in India, found that despite a high emphasis on high-tech processes being adopted, these call centers were often referred to as “new-age sweatshops” and the people working there as “cyber coolies” which often leads to high employee turnover and dissatisfaction. However, contrary to these findings, Jack et al. (2002) deduced that one of the main advantages of internet-based call centre functionality is that instead of customers waiting in a call queue, the web offers customers non-obtrusive and easy ways to address their question. The internet has enabled call centres to give more control to the customer for the level of service desired. Customers can open their own trouble tickets, read and search knowledge bases of Frequently Asked Question’s (FAQ’s), download manuals and guides 24 hours a day, seven days a week (Support Industry.com, 2002).

7.2.1.3 Agents’ Perceptions of Infrastructure/Sick Building Syndrome on Call Centre Effectiveness

The results of the study depicted that overall the agents’ perceptions of the influence of the key dimension of Infrastructure/Sick Building Syndrome on call centre effectiveness indicates a moderate level of satisfaction and perceived positive influence (Mean = 3.2104). These were based on agents’ perceptions of layout, ergonomic design, lighting and ventilation, health and performance and noise and aesthetics that make up their perceptions of the influence of Infrastructure/Sick Building Syndrome on call centre effectiveness.

In terms of the sub-dimension of layout of the work environment, the study reported that agents found that emissions from copiers and printers are prevalent and, hence, layout and style of the office has the potential to impact on health and performance. Agents also reflected that the layout of the office does not allow them to perform their job well. Similarly, Kaplan & Aronoff’s (1996) research reinforces the idea that computers and printers released irritating odours and led to poor indoor air quality. They also noted that due
to ergonomic limitations of the office setting, workers were forced to work in awkward and constrained positions adding to repetitive strain and injury. Furthermore, in a study reported by Bako-Biro, Wargocki, Weschler & Fanger (2004), chemical emissions from three month old computers on the performance of simulated office work by adults in a government building was analysed. The increased use of equipment in offices such as computers, laser printers and photocopiers had generated increased contaminants. It was noted that differences in equipment used led to differences in air quality in different types of organisational settings (Bako-Biro, Wargocki, Weschler & Fanger, 2004). However, Rostron (2008) claims that job stress and dissatisfaction are probably more important causes of symptoms than physical and chemical factors within the environment. Very often computers are thought to be the cause of the problem when it is not the actual computer but rather the work carried out on them that cause the problems.

In terms of the sub-dimension of ergonomic design, the agents in the current study reported that the office chair was not comfortable nor easily adjustable. In addition, agents reported that their workstation equipment did not allow them to perform their job easily. A study undertaken by Leung, Lu & Ip (2005) confirmed that the arrangement of chairs, desks and sofas influence the quality and quantity of interactions. Usability of furniture, flexibility of furniture and availability of storage space at the employees’ personal work space are critical. Flexible and usable furniture can ensure comfort and convenience. An adjustable armchair and sufficient bookshelves can facilitate employee comfort and enhance environmental satisfaction (O’Neill, 1994). In this regard, Vischer (2008) assessed the studies of building occupants functional comfort from workplace design and confirmed that space planners can now access knowledge about how work behaviour, performance and communication is affected by combinations of environmental influences such as lighting and daylight, furniture and spatial layout, noise and ventilation conditions. Evidence is accumulating on the optimal balance of individual workspaces and shared facilities and although there is no simple direction for establishing this balance studies indicate that systematic analysis of the tasks people perform and the environmental requirements for the types of work they are doing may offer a formula that can be applied to key design decisions (Vischer, 2008).
In terms of the sub-dimension of lighting and ventilation, the study found that agents disagreed that the temperature in the office is constantly suitable. Agents disagreed that the bright lights allowed them to work well and that they are always surrounded by a fresh supply of air. Mobley, Roper & Oberle (2005) concur that poor ventilation influences the presence of sick building syndrome. Rostron (2008) also found that air conditioning units and pollution within the atmosphere from both inside and outside the building are main contributors to poor indoor air quality. Rostron (2008) also found that lighting has the potential to affect health and comfort. Repeated dilation and contraction of the pupils of the eyes can cause eye irritations and eye strains (Kaplan & Aronoff, 1996). Morris & Dennison (1995), in their research, found that air conditioned libraries are more likely to suffer from sick building syndrome then libraries that are naturally ventilated. Passarelli (2009), concurs that environments that are too hot or too cold cause physical reactions for occupants. These extreme temperatures can cause distress on the human body leading to physical and mental negative effects. Since lighting and ventilation are considered as one of the critical variables impacting on performance, there is extensive research which supports the findings of this study.

In terms of the sub-dimension of health and performance, the study found that agents reported that the bright lighting and bright computer screens caused headaches and led to eye strains which impacted on their performance. In this regard, Aston (2007) suggests that the problem of lighting can be overcome by implementing skylights and the use of mirrors to track the sun and deliver more rays.

In addition, agents in the current study were displeased with general office cleanliness. The finding was supported by Rostron (2008) who found that regular cleaning and maintenance of items such as air-conditioning, building fabrics and lighting creates a sense of well-being among employees. He further noted that untidy workplaces are hazardous and looks unprofessional.

In terms of the sub-dimension of noise and aesthetics, the study found that the agents disagreed that the décor of the workstation was aesthetically pleasing to produce a functional
environment. In a similar study conducted by Ferdos, Ashrafian & Haghlesan (2011) almost 80 percent of its office participants suffered from noise, followed by ventilation, temperature and then poor lighting. Ferdos et al., (2011) concluded that office owners must pay attention to design appropriate acoustics. They found that acoustics cause great dissatisfaction. Interestingly, a study by Jenzen, Arens & Zagreus (2005) found that workers in totally open plan offices are significantly more satisfied with noise level and speech privacy than occupants in cubicles.

The findings of the current study revealed that agents indicated that the cafeteria did not contribute to a relaxed environment. McKinney, Augustine & Rothwell (2012) confirm that by increasing the implementation of integrated health and wellness options at the workplace, employees should experience a reduction in absenteeism and turnover while enjoying increased productivity and retention, all of which directly affects the firm’s long run profitability.

### 7.2.1.4 Agents’ Perceptions of Customers on Call Centre Effectiveness

The results of the study reflected that agents’ perceptions of the overall influence of the key dimension of Customers on call centre effectiveness indicate a moderate level of satisfaction and perceived positive influence (Mean = 3.4815). These were based on agents’ perceptions of ease of communication between agents and customers that make up their perception of the influence of Customers on call centre effectiveness.

In terms of the sub-dimension of ease of communication between the agent and the customer, the study showed that agents did not always find the customers to be polite. Customers did not always furnish the agents with adequate information for them to be able to easily assist customers with their query/complaint immediately and agents disagreed that customers are very cooperative when talking to them, indicating that communication lines between agents and customers are not always quick and easy. Sawchuk’s (2004) findings are similar to this and he reiterates in his study that agents are required to serve customers and not be abused by them. He advises that agents should attempt not to react to the provocation and remain calm at all times. Agents should also draw the line on abusive callers, making it
clear that such abuse will not help solve the problems and only if customers are willing to be positive and rational, then only should the agent continue the interaction. A contrary view was that proposed by Anonymous (2003) which found that calling the call centre is a frustrating experience for customers. However, Edwards (2002) feels that with the right training and development a customer can be kept satisfied through improved customer service and interaction, increased productivity and lower costs. Edwards (2002) reiterates that responsiveness, attentiveness, care and friendliness are critical training areas for agents working within the call centre to enjoy better customer relations.

7.2.2 Customers’ Perceptions
Customers’ perceptions of the influence of the four key dimensions on call centre effectiveness are discussed.

7.2.2.1 Customers’ Perceptions of Human Resource of Agents on Call Centre Effectiveness
The results of the study reflected that customers’ perceptions of the influence of the key dimension of Human Resource on call centre effectiveness indicates a low level of satisfaction and perceived positive influence (Mean = 2.8625). These findings were based on customers’ perceptions of skills, knowledge, ability, attitude and performance; interpersonal skills, training and development that make up their perceptions of the influence of Human Resource on call centre effectiveness.

In terms of the sub-dimension of skills, knowledge, ability and attitude of agents and call centre effectiveness, the study reported that customers felt that the agents were not extremely effective in handling their needs and did not try hard to resolve their query/complaint. Eisengerich & Bell (2006) concluded that agent’s response speed and recovery initiation, which communicate empathy, effort and respect to the customer is critical in problem management. Customers evaluate the service encounter on the basis of interaction and quality of interpersonal treatment and communication. The flexibility and speed with which concerns are handled is identified as a vital dimension of procedural justice. Furthermore, Heskett, Sasser & Schlesinger (1997) cautions that the longer the time
taken to resolve customer concerns, the greater will be the customers’ perception that procedural justice has been violated. Due to costs and time constraints and the effort involved with participation, customers will be less likely to make constructive suggestions and work with the firm if they perceive that the firm is not taking them seriously.

In terms of the sub-dimension of interpersonal skills of agents and call centre effectiveness, the study found that the customers reported that communicating with agents was not simple and that agents were not receptive to feedback on how they could improve their level of service delivery. Similarly, Davidow (2003) concluded that attentiveness comprising of four areas of respect, effort, empathy and willingness to listen impacts on customer satisfaction. Attitudes and behaviours of the service personnel stand out from the core service and have the potential to “make or break” the experience. Collie, Sparks & Bradley (2000) found that courtesy and respect by service providers has a positive effect on outcomes fairness and satisfaction. Furthermore, Cho, Im & Hiltz (2003) suggest that firms should place greater emphasis on rapid feedback on complaints. A synchronized feedback system is the quickest means of online communication. Online customer service centres and online chat services to their customers are more efficient and offer real time service that enables customers to solve problems/queries without delay.

In terms of the final sub-dimension of training and development of agents and call centre effectiveness, the findings of the study suggest that customers were burdened with being transferred to other agents to try and assist with their queries and that agents failed to always follow-up to check if the customers were satisfied with their service performance. Similarly, in their study Hoffman & Bateson (2006) uncovered seven unsavory behaviour categories of front line staff, namely, apathy, brush-off, coldness, condescension, robotism, rulebook and the run-around approach. In some cases the way people are placed in call centres to handle customer queries and a complaint when they are not really interested in customers further exacerbates the situation. Theron et al., (2003) highlighted that among some of the critical skills that the customer service employees should possess is the habit to follow up with customers to enquire if they were satisfied with the outcomes provided. It may not be the solution the customer wants but it’s a solution nevertheless.
7.2.2.2 Customers’ Perceptions of Customer Service of Agents on Call Centre Effectiveness

The results of the study reflected that customers’ perceptions of the influence of the key dimension of Customer Service on call centre effectiveness indicates a low level of satisfaction and perceived positive influence (Mean = 2.8625). These findings were based on customers’ perceptions of delivery of service, service excellence, service retention and loyalty that make up their perceptions of the influence of Customer Service on call centre effectiveness.

In terms of the sub-dimension of delivery of service of agents and call centre effectiveness, the study found that customers felt that the level of service that they received from the call centre is not always reliable and many also disagreed that they prefer to use the call centre because it was easy to access and make contact with an agent. A similar finding in support of the current study was that of International Business Machines (IBM) (2007) which found that if the self-service portals were designed and deployed effectively they could save the firm between 15 to 30% by redirecting contacts, reducing call volumes and automating assistance. Overall, IBM (2007) found that if implemented correctly self-service portals should provide users with quick and efficient information, portals must be interactive and should lower the firm’s costs. Dean (2008) offers a contrary view to IBM’s (2007) report. He found that although self-service systems experienced rapid growth, numerous complaints were lodged against the system. The basis of IVR is speech recognition accuracy and customers were experiencing recognition failures and there was a lack of choice to speak to human consultants which contributed to service failure. Adhikari (2009) proposed that to facilitate communication today, Facebook, Twitter and Social blogging can be implemented as new tools within firms as part of CRM strategies to foster better relationships with customers.

In terms of the sub-dimension of service excellence of agents and call centre effectiveness, the study found that customers disagreed that the firm always strives to exceed the customers’ expectations of them in terms of service delivery and customers did not receive any assurances from the call centre that it was dedicated to ensuring their satisfaction.
Similar findings were obtained in studies by Zeithaml & Bitner (2003) which identify this difference between desired services which represents the wished for level of performance and adequate service showing more basic service expectations. The resultant difference between the expected service and the experienced service is the zone of tolerance as developed by Parasuraman et al. (cited in Zeithaml & Bitner, 2003) Conversely, Dean (2004), for an Australian call centre, found that there were high ratings for service quality attributes like adaptiveness, assurance, authority to solve problems by agents, lack of queues, empathy and friendliness by agents. There were very narrow zones of tolerances in call centre’s meaning customers expectations of adequate service performance is almost the same or close to their expectations of desired service performance (Jaiswal, 2008).

In terms of the sub-dimension of service retention of agents and call centre effectiveness, the study found that customers were displeased with the compensation received for inferior service and that it was not fair or equitable. Customers also felt that the call centre of the firm did not offer them good incentives to keep doing business with the firm. Similar findings by Lamb et al. (2004) and Lovelock (2001) suggest that a customer may choose to complain on the spot about poor service in which case the firm must respond immediately. Although customers can complain via telephone, in writing, via the internet or through the call centre, websites and blogs have also become popular avenues to voice customer dissatisfaction.

Conversely, Zeithaml et al., (2006) postulate that consumers will only complain about high risk, expensive services. Ashley and Varki (2009) found that attitudinally loyal customers would be inclined to complain to the firm only if rewards were to justify the efforts. The economic benefits would include continuing with the service that one has enjoyed in the past without switching to a new service provider.

In terms of the sub-dimension of loyalty of agents and call centre effectiveness, the study found that customers disagreed that a service failure will not cause them to terminate doing business with the firm in the future. Furthermore, the study found that due to a lack of competitors in this particular service industry, customers were forced to maintain business
relations with the firm in question even in the event of poor service quality being received. Similar findings by Ashley and Varki (2009) suggest that loyal customers express greater satisfaction with service recovery efforts compared to less loyal customers when redress is offered. These results indicate that customers who complain may be among the firms’ loyal customers and firms should monitor their loyalty programs more vigorously. Eisengerich & Bell (2006) found that while they define consumer loyalty as consumers’ intent to stay with the organization, it has been noted that customers demand a role in production and in order to keep them satisfied firms must make provisions to allow for active customer participation. This participative behaviour can reduce customer switching behaviour and defections to other institutions.

7.2.2.3 Customers’ Perceptions of Technology on Call Centre Effectiveness

The results of the study reflected that customers’ perceptions of the influence of the key dimension of Technology on call centre effectiveness indicates a low level of satisfaction and perceived positive influence (Mean = 1.7916). These findings were based on customers’ perceptions of system’s efficiency, ease of use and clarity that make up their perceptions of the influence of Technology on call centre effectiveness.

In terms of the sub-dimension of systems efficiency, the study found that customers did not find it easy to use the interactive voice response (IVR) software when they contact the call centre and customers also found that calling the call centre was not as effective as using the self-service options such as email and internet. Similar findings by Pearce (2012) looked at seven deadly sins of why IVR applications fail to work and the biggest trap is that firms provide service to the customers purely using IVR with no human intervention. While IVR is a great self service facility, it is only useful to route calls and cater for self-service to a closed group; anything beyond this is counterproductive. A frequent trap is not allowing people to connect to an agent. In addition, with internet technological advances, customers enjoy convenience such as web based service centres where customers can ask questions, query payments or log complaints (Hollowell, 2002). However, Sims (2011) suggests that IVR can be a great tool to assist in the retail operations. A fully hosted IVR and call centre application gives corporate a platform to optimize customer experiences as well as manage
costs, increase productivity and generate new revenue. He also suggests that when customers require an agent, a good IVR system effectively and seamlessly routes callers from an IVR to an available customer service representative effortlessly.

In terms of the sub-dimension of ease of use, the study found that customers did not find the self-service options quick and easy nor did they find the firm’s website to be user-friendly. Similar findings by Dabholkar, Bobbitt & Lee (2003) and Weijters, Rangarajan, Falk & Schillewaert (2007) suggest that self service technology has had limited success in retail settings. The primary reason for this was due to the lack of understanding of consumers assessment associated with the usage of self service technology. Conversely, the Economist (2009) & Wang (2012) suggest that self service technology is gaining prominence. This service encourages consumers to produce the service independent of the service employees’ involvement and results in improvements in the retailer’s productivity and service quality (Lee, Fairhurst & Lee, 2009).

In terms of the sub-dimension of clarity, the study found that customers did not find the self service options to be useful in assisting with handling of queries and customers also did not visit blogs to share information about their service encounter with the firm. Similar studies by Makarem, Mudambi & Padoshen (2009) found that it’s not possible to have a single service option to satisfy everyone. In their study some customers preferred technology whilst others preferred human contact. Managers should profile the attitudes of consumers towards technology and interpersonal service encounters and be fully aware of the demographic profiles of its customers as it’s not possible to offer only one method of service contact and service delivery to consumers. Conversely, Hsieh (2005) proposes that self service technology can lead to greater customer service and empowered customers and employees and improved efficiency. Communication is the key to adoption of new technology. The key is to listen to what the customer wants and have a protective and reassuring plan for privacy and security to make consumers adopt self service more readily.
7.2.2.4 Customers’ Perceptions of Infrastructure on Call Centre Effectiveness

The results of the study reflected that customers’ perceptions of the influence of the key dimension of Infrastructure on call centre effectiveness indicates a low level of satisfaction and perceived positive influence (Mean = 2.6650). These findings were based on customers’ perceptions of waiting lines and ease of communication (attention) that make up their perceptions of the influence of Infrastructure on call centre effectiveness.

In terms of the sub-dimension of waiting lines, the study revealed that customers felt that the long waiting lines deterred them from calling the call centre and that based on their previous interactions with the call centre customers are of the opinion that the call centre is not coping with the demands placed on it by customers. Similar findings by Fitzsimmons and Fitzsimmons (2006) and Metters et al., (2006) indicate that waiting lines have a psychological impact on customers. Advanced queuing models should be used by firms to ensure the process is well implemented and managed and to prevent a service failure from occurring. A study undertaken by Antonides, Verhoef & Van Aalst (2002) showed that providing information about the expected waiting time for customers using a telephone service significantly reduced the over estimation of perceived waiting times reported by participants. However, findings by Gueguen & Jacob (2002) and Peevers, McInnes, Morton, Matthews & Jack (2009) have shown that the presence of music can lead to a shorter perceived waiting time when compared with no music. It must, however, be noted that the results indicate that in the cases of short waits, queue managers attempts at interfering in the process of perceived waiting time by using music will make no difference but updates on the other hand will have an influence on affective response in short and long waits and should be used by queue managers rather than music.

In terms of the sub-dimension of ease of communication with the agents and call centre effectiveness, the study found that the customers reported that the agents are not able to maintain a good level of concentration on their query at any time of the day and that the customer finds it problematic to communicate with agents in the call centre. Similar findings by Grote (2005) suggest that management must monitor the progress of employees and this can be done by obtaining feedback from consumers about the level of service provided by a
particular member of staff. Employees can also be observed by management on how they behaved and management needs to include staff in the assessment by asking them if they are coping. In the event of weakness, training and other support should be implemented (Brown, 2007; Cavitt, 2010; Snow, 2007). However, Edwards & Edwards (1991) and Mathes (1992) suggest that employers should offer ergonomics training and exercise programs, allow for job rotation and provide rest breaks. In view of the fact that employees vary in different proportions, it is important to provide flexible equipment and customize workstations to improve productivity and performance.

7.2.3 Comparison of Agents’ and Customers’ Perceptions of the Interactive Effects of the Key Dimensions of the study on Call Centre Effectiveness

Agents’ and customers’ perceptions of the interactive effects of the key dimensions of the study on call centre effectiveness are discussed separately.

7.2.3.1 Agents’ Perceptions of the Interactive Effects of the Key Dimensions of the study on Call Centre Effectiveness

The study has found that agents perceive that the key dimensions of Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers have only a moderate positive impact on call centre effectiveness.

In terms of Human Resource and call centre effectiveness, the study revealed that agents do not have complete authority in decision making to ensure customer complaints are met. Agents also elucidated that mental exhaustion and physical strain experienced on the job hindered their communication with customers. Agents were also uncomfortable informing their supervisors when they felt pressured or incapable of coping and many were uncomfortable working with telephone scripts during a call. The study also found that there were no opportunities for growth and advancement, agents did not find their jobs fulfilling and that they lacked proper training manuals to assist them in performing their jobs better. Agents were dissatisfied with the rewards and recognition to motivate them to work harder. A large majority was unhappy with their salary; many agents felt that their team leaders did
not encourage high achievement and management failed to provide continuous feedback to help improve their job performance.

In terms of Technology and call centre effectiveness, the study found that agents did not always deal with electronic queries/complaints within 24 hours of receiving them and agents found that software used was not always fast and reliable. Agents disagreed that web based e-services were more effective for addressing customer needs than talking to agents personally and agents felt that web based communication did not facilitate better communication between the firm and the customer better than an agent can.

In terms of agents’ perceptions of Infrastructure/Sick Building Syndrome and call centre effectiveness, the study found that apart from the inconvenience of access to laser copiers and printers which are placed away from them, the emissions from these printers and copiers are prevalent and, hence, layout and style of the office has the potential to impact on health and performance of the employees. Layout of the office prevented agents from performing well. Agents reported having uncomfortable chairs and work station equipment that hindered performance. Temperature, lighting, office cleanliness and air supply were problematic for agents thereby, impacting on performance. Décor of the workstation was not aesthetically pleasing and the lack of a suitable cafeteria did not contribute to a relaxed environment in the workplace.

In terms of ease of communication between customers and agents, agents found customers to be impolite, not always equipped with all of the necessary information to assist the agent in terms of resolving the query or complaint and often uncooperative making communication difficult between both parties.

### 7.2.3.2 Customers’ Perceptions of the Interactive Effects of the Key Dimensions of the study on Call Centre Effectiveness

The study has found that in terms of the key dimensions of Human Resource, Customer Service, Technology and Infrastructure there has been an overall dissatisfaction by customers regarding call centre effectiveness.
In terms of Human Resource and call centre effectiveness, the study revealed that customers did not find agents to be effective in handling queries/complaints promptly nor did they find communication with agents to be simple. They also reported that agents were not receptive to feedback on how to improve on their service delivery; customers were burdened with being transferred to other agents to assist in their queries and agents failed to follow up to check if customers were satisfied with service delivery.

In terms of Customer Service and call centre effectiveness, the study found that the service received from the call centre by customers was not reliable and nor did customers prefer to contact the call centre because it was easy to access and make contact with an agent. Customers felt that the firm did not strive to exceed their expectation of service delivery and the call centre failed to give them service assurances. Furthermore, customers were displeased with compensation received for poor service delivery. Customers felt that the firm did not provide good incentives to them to entice them to keep doing business with the firm. Customers disagreed that a service failure will prevent them from doing business with the firm in the future; however, the reason for this could be due to the fact that the firm is the only service provider in the industry and there are no other competitors present.

In terms of Technology and call centre effectiveness, the study revealed that the customer did not find it easy to use IVR software and that calling the call centre was not as effective as using the self service technology. Customers did not find the self service options quick and easy to use nor was the firm’s website user friendly. The self service options were not useful in handling customer queries and many customers did not frequent blogs.

In terms of Infrastructure and call centre effectiveness, the study showed that the long waiting lines were a deterrent to calling the call centre and that based on previous interactions the call centre was not coping with the demand being placed on it by customers. Furthermore, customers reported that agents did not always maintain a good level of concentration when handling their queries and they found it problematic to communicate with agents in the call centre.
7.3 Intercorrelations amongst the Key Dimensions impacting on Call Centre Effectiveness

Agents’ perceptions of the intercorrelations of the key dimensions having the potential to impact on Call Centre Effectiveness will be discussed first and then customers’ perceptions will follow. A comparison of the two perspectives will also be presented.

7.3.1 Intercorrelations amongst the Key Dimensions impacting on Call Centre Effectiveness from an Agents’ Perspective

In the current study, agents perceived that there exist significant intercorrelations amongst the key dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) that have the potential to impact on call centre effectiveness. The implication is that an improvement in any one of these key dimensions has the potential to have a snowballing effect and thereby, enhance call centre effectiveness.

Similar findings by Richardson & Howcroft (2006) present two contrasting views of call centre literature which they refer to as the utopian (positive) and the dystopian (negative) vision. The positive vision is represented by enthusiastic staff operating out of a relaxed environment in a professional manner, using strategic technology and having a customer-focused attitude, delivering quality services. In contrast, the dystopian vision describes the call centre as a sweatshop of the 21st century, where the work is highly routinized and repetitive with the absence of employee control, high labour turnover and poor technology and poor chances of promotion (Richardson & Howcroft, 2006). To assume that software technology can transform service delivery in terms of empowerment of employees, teamwork, customer service and monitoring and surveillance is myopic as all these dimensions need to work together to transform service delivery (Richardson & Howcroft, 2006). Hossain, Moon, Yun & Choe (2012) found that the role of the users’ psychological traits clearly highlight the importance of user roles in enhancing their performance in call centre information systems, suggesting that human resources and technology are closely correlated with each other. Haynes (2008) undertook an assessment of the relationship between the physical comfort of the office environment and its effect on office occupiers and found that there was enough evidence to support the claim that office comfort can affect
productivity. Conversely, Snow (2005) found that technology is replacing the role of call centre agents completely; the majority of call centre costs are related to aspects like people, property, workstations, training, recruitment and wages. However, new technologies now offer to reduce costs by replacing agents completely through voice automation and advanced speech recognition.

7.3.2 Intercorrelations amongst the Key Dimensions Impacting on Call Centre Effectiveness from a Customers’ Perspective.

In the current study, customers’ perceived that there exist significant intercorrelations amongst the key dimensions (Human Resource, Technology, Infrastructure and Customer Service) that have the potential to impact on call centre effectiveness. The implication is that an improvement in any one of the key dimensions has the potential to have a rippling effect and thereby, enhance call centre effectiveness.

According to Srandberg and Dalin (2010), relationship building in the insurance industry is a priority. Managers of in-bound call centres were seeking to encourage relationships between customers and employees who receive their in-bound calls. The results of this study demonstrate that managers of in-bound call centres emphasize relationship-oriented approaches to their work; however, many fail to design their call centre’s work practices appropriately to meet this requirement. Similarly, customer satisfaction may be based on agent’s communication skills, timeliness and quality which includes accuracy and consistency with which agents give advice, including their knowledge and politeness. Thus, the role of agents in customer satisfaction is heightened (Brown & Maxwell, 2002). There is evidence to suggest that positive employee attitudes are linked to increased customer satisfaction (Schmitt & Allscheid, 1995). Similarly, research by Antonides et al., (2002) and Metters et al., (2006) show that waiting lines have a psychological effect on customers and impacts on customer satisfaction in terms of infrastructure. Research undertaken by Lee et al., (2009) suggests that technology is enabling customers to produce the service independents of the involvement of call centre agents and this is further supported by the findings of Snow (2005).
7.3.3 Comparison of Agents’ and Customers’ Perceptions of intercorrelations of the Key Dimensions impacting on Call Centre Effectiveness

In the current study, it was found that the perceptions of customers and agents regarding the impact of the dimensions of the study on call centre effectiveness do not significantly correlate with each other. The implication is that customers and agents have varying perceptions of the impact of Human Resources, Technology, Infrastructure and Customer Service on call centre effectiveness respectively.

7.4 Biographical influences on Perceptions of Call Centre Effectiveness

Biographical influences on agents and customers on perceptions of call centre effectiveness are discussed separately.

7.4.1 Biographical influences of Agents on Perceptions of Call Centre Effectiveness

In terms of the biographical influences of agents on the perceptions of call centre effectiveness, the majority of the respondents in this study were mostly females (57%) and males were 43%. They were relatively young as the majority of the respondents of the sample fell between the 20 – 29 year age group (67.5%). They were mainly employed on a full-time basis (66.2%). The majority of the agents were employed at the call centre for between 1 – 3 years (51.7%). The sample size comprised of 151 agents. The biographical profiles of call centre agents seem typical of employees in a call centre environment.

In the current study, it was found that the biographical variables of agents (gender, employment status, tenure and education) only had a significant influence on agents’ perceptions of Infrastructure/Sick Building Syndrome.

In terms of the influence of employment status on infrastructure/sick building syndrome, employment status specifically influences three dimensions of sick building syndrome, namely, ergonomic design, lighting and ventilation and, health and performance. Similarly, in a study conducted by Taylor, Baldry, Bain & Ellis (2003), of 1100 staff seventy five percent were directly employed on a full time basis. About fifty six percent of respondents complained about ergonomic aspects such as background noise and poor equipment, poor
connections (8.5%) and inability to clearly hear customers (17%). In addition, the study found that agents complained about eye problems caused by ambient factors (air quality and circulation, lighting) and headaches which led to coughs, ear-aches, runny noses and sore joints. In terms of tenure and sick building syndrome, it was found that tenure of agents specifically influenced the perceptions of the impact of sick building syndrome on call centre effectiveness based on health and performance and, noise and aesthetics. Contrary to the findings of the present study, which suggests that the call centre is characterized by high employee turnover, in a study conducted by Taylor et al., (2003), the sample comprised of 10% of agents who joined the firm directly after completing high school and have been employed with the firm for longer than twenty years or more; yet despite this, they still experienced symptoms of sick building syndrome such as background noise and poor lighting that impacted on their performance. In terms of education, it was found that the educational profiles of the agents significantly influenced the perceptions of the impact of sick building syndrome on call centre effectiveness based on the layout of the work environment. Similarly, Taylor et al., (2003) explored agents’ responses relating to workstation comfort and discomfort. Although the majority of the respondents reported that they were happy with the height of their chairs and desks and the position of computer screens and keyboards, there were a few that reported discomfort with the lumbar support from chairs and the amount of workspace they enjoyed in respect of ergonomic design and layout.

The remaining biographical variables (age, race) did not have a significant impact on agents’ perceptions of the dimensions (Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers) and its impact on call centre effectiveness.

7.4.2 Biographical Influences of Customers’ on Perceptions of Call Centre Effectiveness

Customers varying in biographical profiles (gender, age, race and education) did not differ significantly in the perceptions of the key dimensions (Human Resource, Technology, Infrastructure and Customer Service) having the potential to impact on call centre effectiveness respectively. Due to the paucity of the research no comparative studies were
found specifically addressing the effects of these biographical profiles on the perceived influence of the key dimensions on call centre effectiveness.

7.5 Impact of Key Factors on Call Centre Effectiveness

Agents’ perceptions of the impact of the key dimensions on Call Centre Effectiveness will be discussed first and then customers’ perceptions will follow. A comparison of the two perspectives will also be presented.

7.5.1 Impact of Key Factors on Call Centre Effectiveness: Agents’ Perceptions

The results of the multiple regression indicate that agents perceive the key dimensions of the study to impact positively on call centre effectiveness in varying degrees, which in descending level of impact are:

- Infrastructure/sick building syndrome
- Technology
- Human Resource
- Customers

In the current study, it was found that agents perceive call centre effectiveness to be positively influenced to the greatest extent by infrastructure/sick building syndrome. It is evident from the literature that the physical design of and environmental conditions in the workplace have a significant influence on organisational performance through contributions to worker satisfaction. Empirical research has shown that when human needs are taken into consideration in office design then greater employee satisfaction is experienced (Stallworth & Kleiner, 1996).

The second factor impacting positively on call centre effectiveness, as perceived by agents is technology; the influence of technology is changing the nature of call centres. The increasing use of web access by customers is changing the number of customer agents and their roles as well as integrating customer and operational data, allowing agents a greater understanding of their customers and their needs (Armistead et al., 2002).
The third factor impacting positively on call centre effectiveness, as perceived by agents is human resource. In order to motivate and ensure a great degree of commitment from the workforce a proper reward system has to be in place. Incentive schemes are a critical part of the performance component in the assessment targets of call centres (Rowe et al., 2011).

The fourth factor impacting positively on call centre effectiveness, as perceived by agents is customers with regards to ease of communication between customers and agents. In their study, Mahesh & Kasturi (2006) suggested that in order to assist agents to handle difficult customers call centre managers must help train them. This can be done by conducting focus group sessions where staff shares their stories about the worst calls they received as a catharsis mechanism. This serves as an opportunity for managers to build a communication system.

7.5.2 Impact of Key Factors on Call Centre Effectiveness: Customers’ Perceptions

The results of the multiple regression indicate that customers perceive the key dimensions of the study to impact positively on call centre effectiveness in varying degrees, which in descending level of impact are:

- Human Resource
- Customer
- Infrastructure
- Technology

In the current study, it was found that customers perceive call centre effectiveness to be positively influenced to the greatest extent by Human Resource skills of agents that service their needs. Employee commitment and the high levels of employee withdrawal and turnover are a great area of concern in call centre studies (Deery et al., 2002). The strength of the service climate is directly linked to the relationship between employees and customers (Schneider, White & Paul, 1998).

The second factor impacting positively on call centre effectiveness, as perceived by customers, is customer service. Affording customers the opportunity to make constructive suggestions on how to improve service delivery, allowing customers a role in service
production to prevent switching behaviour and ensuring customer loyalty and problem management by the service organisation and problem management is likely to influence a customer’s evaluations of service quality. These are some of the service expectations of customers (Eisingerich & Bell, 2006).

The third factor impacting positively on call centre effectiveness, as perceived by customers, is infrastructure. The current study assessed the impact of waiting lines and ease of communication (attention) between agents and customers. Listening to customers can contribute to making the call centre a customer centric organization (Jaiswal, 2008).

The fourth factor impacting positively on call centre effectiveness, as perceived by customers, is technology. Although technology has led to a loss of empathy on the front line and has resulted in a weakening of customer care, newer technologies, if well deployed, can help overcome the problem. Gorry & Westbrook (2011) suggest that the three ways that firms can improve their customer care is by improving its self-service customer care channels, helping front-line employees respond empathetically and exploiting social networks to better care for customers.

### 7.5.3 Comparison of Agents’ and Customers’ Perceptions of the Impact of the Key Dimensions on Call Centre Effectiveness

From the aforementioned results (7.5.1 and 7.5.2), it is evident that agents and customers perceive the variables of Human Resource, Customer Service, Infrastructure and Technology as impacting in varying degrees on call centre effectiveness. Figure 7.1 illustrates the perceived differences of the impact of the key dimensions on call centre effectiveness by customers and agents. The impact of the items within the dimensions of the study were also evaluated using multiple regression and are also reflected in the boxes within Figure 7.1. Agents believe that ergonomic design of workstation influenced infrastructure/Sick Building Syndrome the most, personal interaction versus self-service was perceived by agents as having the greatest impact on technology, remuneration/motivation impacted the most on Human Resource and ease of communication between agent and customers influenced customer interaction (Figure 7.1). Customers believe that skills,
knowledge, ability and attitude of agents impacted on the Human Resource in the call centre the most, service retention was perceived by customers as having the greatest influence on customers, infrastructure was influenced the most by waiting lines and perceived ease of use impacted on technology the most.
Figure 7.1
Impact of Key Dimensions on Call Centre Effectiveness: Agents’ and Customers’ Perceptions
Figure 7.1 indicates that whilst agents perceive infrastructure/sick building syndrome to have the greatest impact on call centre effectiveness customers believe that call centre effectiveness is influenced the most by human resource. Studies by McGuire & McLaren (2009) reiterate the importance of the physical environment on the employees’ well-being and performance and commitment. Through ensuring a good physical environment employee commitment is enhanced. Physical layout and equipment in the environment can have strong effects on employees’ well-being. A great source of motivation and commitment for the work force is the reward system. Incentive schemes are a crucial part of the performance management system. The purpose of the reward system is to align goals of the employee with that of the firm (Rowe, Marciniak & Clergeau, 2011). Certain types of services require more highly qualified and trained personnel with high educational skills, but if tasks are repetitive and employees are easily replaced, companies hire less educated and lower paid workers. The high levels of unemployment also see educated workers hired for lower level tasks which leads to demotivation and dissatisfaction (Rowe et al., 2011). They find that the youth may be a factor in stress resistance but experience can provide excellent powers of judgement. According to Gilmore (2001), the functions of the call centre are largely routinized, scripted and monitored, and require minimal training; hence, much of the call centre industry work is outsourced in geographic areas with low labour costs (Houlihan, 2001). Customers expect good quality service from call centre agents.

Furthermore, Figure 7.1 reflects that agents perceive technology as having a large impact on call centre effectiveness. However, it is evident from Figure 7.1 that customers place greater emphasis on human resource and regard technology as having the least impact on services. Technology has become a key enabler in delivering high levels of service; however, over-reliance on technology can impact negatively on service quality (Jack & McCary, 2006). The question that one needs to ask is whether technology based services can provide the same high level of service that customers expect as they do from interpersonal service providers. As we have seen from the literature, if implemented correctly technology has the potential to save the organisation a lot of money in the long run; however, the literature also suggests that over reliance on self service technology to the point of phasing out human contact could have disastrous consequences for the organisation so it becomes imperative
from both an agent and a customer perspective to be able to strike a balance and open up the lines of communication (Jack & McCary, 2006).

In addition, whilst agents view customers (ease of communication between customers and agents) as having the least, though significant, impact on call centre effectiveness customers perceive such communication as being significant in influencing call centre effectiveness. Waiting lines are a major deterrent in a call centre irrespective of whether the call centre offers self service options or whether the customer has to hold for an agent. Research by Peevers et al., (2009) suggest that listening to music can lead to the perception of shorter waiting times while the customer is waiting in the queue but in the long run, long waits should be avoided. Customer retention strategies were also very prominent in the study and customers needed to feel like valued members of the organisation, which clearly was not happening. One way of doing this is by providing service guarantees and assurances (Hoffman & Bateson, 2006). The findings of the study revealed that customers did not feel like valued customers of the firm.

7.6 Summary Analysis of the Key Findings of the Study
The key findings on agents’ and customers’ perceptions of the four dimensions influencing call centre effectiveness are discussed separately. These findings clearly reflect the gaps in service delivery as perceived by agents as well as the gaps that customers identify as potential obstacles on their part in ensuring effective service delivery.

7.6.1 Agents’ Perceptions
In terms of the descriptive statistics of the study, the agents’ perceptions of the influence of the key dimensions of Human Resource, Technology, Infrastructure/Sick Building Syndrome and Customers on call centre effectiveness produced the following key findings:

- **Human Resource**
  
  - Agents lacked authority to make decisions to satisfy customer complaints.
  
  - Agents reported mental exhaustion and physical strain which hindered their communication with customers.
Agents were not comfortable informing supervisors when they felt they were not coping with work pressure.

Agents were uncomfortable using pre-prepared telephone scripts.

Agents’ jobs were not fulfilling in terms of opportunities for growth and advancement.

Agents were not provided with training manuals to assist them with work performance.

Agents were displeased with rewards and recognition systems.

Management did not provide incentives to motivate agents to work harder.

Team leaders did not encourage agents to strive towards high achievement and failed to provide feedback in terms of job performance.

- **Technology**

Agents did not always deal with electronic queries/complaints within 24 hours of receiving them.

Software was not always fast and reliable.

Web based e-services were not more effective for addressing customer needs than talking to agents.

Agents disagreed that web based communication facilitates better communication between the firm and the customer than the agent can.

- **Infrastructure/Sick Building Syndrome**

Agents found that emissions from copiers and printers are prevalent and hence, layout and style of the office has the potential to impact on health and performance.

Agents disagreed that layout of the office allowed them to perform their jobs well.

Agents reported that their office chair was not comfortable and easily adjustable.

Agents’ workstation equipment did not allow them to perform their job easily.

Agents disagreed that bright lights allowed them to work well and reported they were not always surrounded by fresh air.

Agents implied that bright computer screens and bright lighting caused headaches and hindered performance and agents were displeased with office cleanliness.
Agents were displeased with the décor of the workstation, found it aesthetically displeasing and emphasized the cafeteria did not contribute to a relaxed work environment.

- **Customers**

  - Agents found that customers were not always polite and that customers did not always furnish them with adequate information for them to quickly assist customers with their queries/complaints easily.
  - Agents disagreed that customers were cooperative when talking to them indicating that communication lines between the two parties are not always quick and easy.

In terms of the inferential statistics, agents also perceived that the key dimensions that have the potential to impact on call centre effectiveness significantly relate to each other and, impact on call centre effectiveness in varying degrees.

### 7.6.2 Customers’ Perceptions

In terms of the descriptive statistics of the study, the *customers’ perceptions* of the influence of the key dimensions of Human Resource, Technology, Infrastructure and Customers on call centre effectiveness produced the following key findings:

- **Human Resource**
  - Customers found agents to be extremely ineffective in handling their needs and agents did not try to resolve their query/complaint promptly.
  - Customers found communicating with agents difficult and agents were not receptive to feedback on how they could improve their performance delivery.
  - Customers felt burdened by being transferred to other agents often and agents failed to follow up to check if they were satisfied with service delivery.
- **Customers**
  - Customers felt that the level of service received from the call centre was not reliable and many disagreed that they prefer to use the call centre because it is easy to access and make contact with an agent.
  - Customers felt that the firm failed to meet their service expectations.
  - The firm failed to provide service assurances to the customer ensuring satisfaction.
  - Customers were displeased with the compensation received in the event of service failure.
  - Customers disagreed that a service failure will cause them to discontinue doing business with the firm.

- **Technology**
  - Customers did not find it easy to use Interactive Voice Response (IVR) and found that calling the call centre was not as effective as using the self service options.
  - Self service options were not quick and easy to use nor was the website user friendly.
  - Self service options were not useful in handling customer queries and customers did not visit blogs to share information about service experiences.

- **Infrastructure**
  - Long waiting lines deterred customers from calling the call centre and customers feel that the call centre is not coping with the demands being placed on it by customers.
  - Customers felt that agents are not able to maintain good levels of concentration on their query at any time of the day and the customers find it difficult to communicate with agents in the call centre.

In terms of the inferential statistics, customers also perceived that the key dimensions that have the potential to impact on call centre effectiveness significantly relate to each other and, impact on call centre effectiveness in varying degrees.
7.7 Conclusion

This chapter presented an in-depth discussion of the results of the study from the perspective of both the agent and the customer in terms of the key dimensions and its impact on call centre effectiveness. The results of the study were compared and contrasted to that of related research work undertaken in the field by other renowned researchers to draw similarities and differences in the findings. Several key findings of the study have been uncovered and these will be used to develop a framework/model to be implemented, with a view to overcoming the barriers and challenges that have been identified which are impeding the effectiveness of the call centre in managing customers and their needs. The next chapter will focus on the development of this framework and will attempt to provide guidelines and recommendations to implement in order to address the challenges that the study has revealed and to enhance call centre effectiveness.
8.1 Introduction
The final chapter aims to draw on the key points of the intense discussion of the results of the study from the perspective of both agents and customers in terms of the key dimensions and its impact on call centre effectiveness, as presented in the previous chapter. Several key findings of the study have been uncovered and this chapter will develop a framework for practitioners and stakeholders to implement, with a view to overcoming the barriers and challenges that have been identified, which are affecting the effectiveness of the call centre in managing customers and their needs.

Due to the dual perspective of the study, namely, the call centre agents’ perspective and the customers’ perspective, the recommendations will be discussed in two distinct sections for convenience and ease of reading.

8.2 Recommendations based on the Results of the Study
Recommendations are based on agents’ and customers’ perceptions of the four dimensions influencing call centre effectiveness.

8.2.1 Agents’ Perceptions
- Human Resource
In terms of agents’ perceptions of the influence of the sub-dimension of Human Resource on call centre effectiveness, the following recommendations are suggested:
  - Skills, knowledge, ability, attitude and performance: It was found that agents lacked authority to make decisions to satisfy customer complaints. Additionally, agents reported mental exhaustion and physical strain which hindered their communication with customers. A greater level of authority should be allowed to certain agents or team leaders in terms of decision-making to be able to expedite certain key decisions and allow quicker resolution of customer complaints. A way of overcoming the mental
exhaustion would be to split teams into smaller groups and have them work shorter shifts to prevent fatigue and burnout from setting in.

- **Interpersonal skills:** Agents were not comfortable informing supervisors when they felt that they were not coping with work pressure and were uncomfortable using pre-prepared telephone scripts. It is suggested that management meet with call centre managers on a monthly basis to discuss performance and annual performance reviews and to encourage and make employees feel comfortable enough to inform management if they are not coping with work demands. Frequent team building exercise programs are also suggested to make agents feel part of the corporate team. In terms of telephone scripts it is imperative that all call centre agents work out a telephone script to answer the phone and welcome a caller or enquire what the problem is. However, more intricate customer queries/complaints require greater human contact; hence, scripts will not work in such scenarios. Agents should be allowed to interact at their own discretion with the customer in such situations.

- **Training and development:** Agents found that their jobs were not fulfilling in terms of opportunities for growth and advancement. The organisation should encourage opportunities for progression, through training programs and incentive schemes for agents excelling in terms of outstanding performance. This serves to motivate agents to strive to work harder to improve their skills and training. Performance bonuses, timeshare giveaways, vouchers, a half day off and bursaries are examples of some of the incentives that can assist agents in their development. Agents also reported a lack of training manuals to assist with work performance. The organisations’ Human Resources training division should provide comprehensive manuals as well as job descriptions to agents immediately so that they are fully aware of management’s expectations of them in terms of service delivery outcomes and this will help prevent an attitude of complacency from setting in amongst agents.

- **Remuneration/motivation:** Agents were displeased with the rewards and recognition systems. Management did not provide incentives to motivate agents to work harder.
Management should put into practice incentives to recognize good efforts from its staff. A monthly staff newsletter commending agents' achievements, congratulatory e-mails from satisfied customers praising agents for jobs well done, a certificate recognizing outstanding performance and an employee of the month award, a cash bonus are all examples of little efforts that go a long way towards pleasing and retaining staff and contributing towards a healthy work environment.

- **Teamwork**: Team leaders did not encourage agents to strive towards high achievement and failed to provide feedback in terms of job performance. The organisation should recruit a set of highly motivated team leaders to lead the call centre team. They need to be goal driven, must have a strategic vision in mind, have to be natural leaders, have excellent interpersonal skills and most of all be in a position to cope well under pressure, to drive the team forward whilst at the same time providing constant feedback in terms of benchmark targets and where the team is falling short so that corrective action is taken to address the shortfalls.

- **Technology**

  In terms of agents’ perceptions of the influence of the sub-dimension of Technology on call centre effectiveness, the following recommendations are suggested:

  - **System’s understanding/ease of use**: Agents did not always deal with electronic queries/complaints within 24 hours of receiving them. Software was not always fast and reliable. The organisation has the capacity to hire more agents. It is suggested that a team is set up to specifically tackle electronic queries/complaints within a 24 hour window period and to reduce this period. Other large organisations have successfully implemented such strategies successfully. In view of the nature of the service being offered by the organisation in question, this 24 hour window period is simply unacceptable and has to be reduced as a matter of urgency. The software is also in urgent need of upgrade.

  - **Personal interaction versus self service**: Web based e-service was not more effective for addressing customer needs than talking to agents nor does it facilitate better
communication than the call centre. The organisation’s web site and e-service need to be redesigned and given a major face-lift. Software needs to be upgraded. Faster technology needs to be implemented. The site needs to be more user friendly. Presently not very much information is available and the website does not offer much support to the customer. Information needs to be updated, such that the customer is able to help themselves and not have to be so dependent on the call centre in the future.

- **Infrastructure/Sick Building Syndrome**

In terms of agents’ perceptions of the influence of the sub-dimension of Infrastructure/Sick Building Syndrome on call centre effectiveness, the following recommendations are suggested:

- **Layout:** Emissions from copiers and printers are prevalent and hence, layout and style of the office has the potential to impact on health and performance. In addition, copiers and printers are inconveniently placed for use by agents. Furthermore, the layout of the office does not allow agents to perform their job well. Offices are predominantly open-plan; workstations should be well equipped and large enough to ensure functionality and ease of operation. Many call centres lacked proper workstations kitted out with the necessary equipment to be fully operational. Ensure that copiers and printers are placed in well ventilated areas away from call centre agents to prevent emissions from affecting productivity and performance.

- **Ergonomic design:** Office chairs were reportedly uncomfortable and not adjustable and the workstation equipment did not allow agents to perform their work easily. The organisation should invest in proper furniture and comfortable office chairs as agents spend large amounts of time at their desks seated in these chairs and incorrect posture and seating leads to all kinds of discomfort and poor productivity. In addition, proper equipment like up-to-date computers, office equipment and copiers, state of the art telephones and technology, headsets and large display screens also contribute to greater productivity and functionality in the workplace.
Lighting and ventilation: Bright lights did not allow agents to work well and they were not always surrounded by a supply of fresh air. Too much artificial lighting leads to tired or strained eyes, so provisions should be made to implement sky lights in the building if possible or to provide access to natural light through windows or the ability to adjust the brightness of lights in the building could also possibly assist. There should also be windows present that can be opened in the building to allow for the provision of fresh air into the building and to prevent an over reliance on air conditioning. Ensure that air conditioners are regularly cleaned and well maintained especially in older buildings.

Health and Performance: Bright computer screens and bright lighting caused headaches and hindered performance and agents were displeased with office cleanliness. Careful attention should be given to layout of workstation and lighting such that glare is minimized for agents. Agents should also be provided with computer screen covers to cut out glare if they find that the glare is disturbing their eyes. Agents should be allowed short breaks in between calls as opposed to sitting at their desks for long periods of time as this adds to their fatigue. In addition, the office should be cleaned regularly to ensure that the work environment is clean, healthy and safe to operate out of.

Noise and aesthetics: Agents emphasized that they were displeased with the décor of the workstation and found it displeasing that the cafeteria did not contribute to a relaxed work environment. It is recommended that the call centres of the organisation be uplifted and upgraded. Aside from the technological upgrade the centre needs a physical upgrade too. A fresh coat of paint in inviting pastel colours makes for a pleasing, professional environment. This also has a psychological impact on workers and affects productivity. In addition, the literature suggests that a cafeteria contributes to a relaxed environment for workers to relax and unwind during breaks but this organisation has NO cafeteria present and needs to make provisions urgently across all of its call centres.

Customers
In terms of agents’ perceptions of the influence of the sub-dimension of Customers on call centre effectiveness, the following recommendations are suggested:
Ease of communication between agents and customers: Agents found that customers were not always polite and customers did not always furnish them with adequate information for them to quickly assist with their query or complaint. Customers were also not very cooperative when talking to agents indicating that communication lines are difficult between agents and customers. Agents need to be patient at all times. Customers are always going to be difficult especially if they have a complaint. Hence, it is important for agents to always remain calm and try to get as much information as possible out of the customer before attempting to assist. There are no rules when it comes to dealing with a customer as each situation is unique and it depends on the agent’s proficiency and their ability to remain professional under extreme pressure. Informal sessions where agents share their experiences with each other on how to cope with difficult customers is very constructive and helpful especially for new agents just beginning their careers in the call centre.

The aforementioned recommendations for enhancing call centre effectiveness based on the results of agents’ perceptions are graphically presented in Figure 8.1.

8.2.2 Customers’ Perceptions

- Human Resource

In terms of customers’ perceptions of the influence of the sub-dimension of Human Resource on call centre effectiveness, the following recommendations are suggested:

- Skills, knowledge, ability and attitude: Customers found that agents were extremely ineffective in handling their needs and agents did not try to resolve their query or complaint promptly. It is recommended that agents are put through stringent training programs and given comprehensive training manuals to assist in performance and to assist them in terms of understanding what the service expectations of customers are and at what levels they should be delivering or performing their services in order to eliminate these perceived gaps in terms of service delivery between service delivery expectations and service outcomes.
Interpersonal skills: Customers found communicating with agents difficult and agents were not receptive to feedback on how they could improve their performance delivery. It is suggested that feedback must be encouraged either through e-mail, sms, letter writing, or even a quick multiple choice questionnaire assessing the customers overall service encounter with the organisation via the agent through the call centre will assist with improving future performance delivery.

Training and development: Customers felt burdened being transferred to other agents often and agents failed to follow up to check if they were satisfied with service delivery. It is suggested that calls should be transferred to a supervisor only as a last resort but that all agents have the necessary skill and authority to make operational decisions that the centre faces on a daily basis. All queries especially complaints must be followed by a courtesy call to check that the customer is satisfied with the service outcome especially complaints that are moderate or severe in nature.

Customers
In terms of customers’ perceptions of the influence of the sub-dimension of Customers (relating to service delivery, service retention, excellence and customer loyalty) on call centre effectiveness, the following recommendations are suggested:

Delivery of service: Customers felt that the level of service received from the call centre was not reliable and many disagreed that they prefer using the call centre because it was easy to access and make contact with an agent. Furthermore, customers felt that the firm failed to meet their service expectations. It is suggested that to manage this obvious gap between customer expectations of service and actual service experience the organisation needs to revisit their entire customer service delivery process to address customer service quality. Customers expect quick response times, skilled agents and expedient service delivery processes. The organisation needs to employ more agents to deal with the large customer database. The ratio of agents to customers is disproportionate presently. Software needs to be upgraded as does infrastructure. Agents need to undergo stringent training to understand targets, job descriptions and expectations of them in terms of service delivery. The organisation needs to invite the public, its customers, to
provide input into what it is they require in terms of service expectations. Once there is some indication of customer expectations, only then can the organisation adequately administer services at the required levels to address the inequities and the gaps in the current services model between expectations and current service levels. This service audit will improve the organisation’s service quality thereby reducing the service gap and eliminating the interpretation gap which is the difference between what the firm promises and what the customer thinks was promised by the communication.

- **Service excellence:** Customers felt that the firm failed to meet their service expectations and that the firm failed to provide service assurances to the customer thereby, ensuring satisfaction. It is recommended that the organisation puts into practice certain assurances that they are committed to customer satisfaction and that in the event of service failure, they are committed to redress to ensure ultimate customer satisfaction. This serves to allay fears and serves as a guarantee to customers that the firm is committed to customer care in the long run. A written assurance pledging the firm’s commitment to customer satisfaction is suggested.

- **Service retention:** Customers were displeased with the compensation received in the event of service failure and the firm did not offer incentives to customers to keep doing business with the firm in the event of service failure. It is suggested that a compensation be awarded to customers, which does not have to always be monetary in nature and can take the form of a written apology either via e-mail or telephonically. Customers should never be taken for granted or be made to feel unappreciated.

- **Loyalty:** Customers disagreed that service failures will cause them to discontinue doing business with the firm. This could be due to the fact that there are no competitors in this service industry and the customers are forced to maintain business relations with the organisation in question due to a lack of alternatives. Hence, it is suggested that the firm should be committed to addressing the service quality shortfalls and to foster greater customer loyalty as they are the only service providers currently in the market.
- **Technology**

In terms of customers’ perceptions of the influence of the sub-dimension of Technology on call centre effectiveness, the following recommendations are suggested:

- System’s efficiency: Customers did not find it easy to use the Interactive Voice Response (IVR) and found that calling the call centre was not as effective as using the self service options such as e-mail and internet. Upgrade the IVR system to improve response rates and upgrade the software technology in the call centre to improve turnaround times.

- Ease of use: Self service options were not quick and easy to use nor was the website user friendly. It is suggested that the website be upgraded to include more self-help links. More Frequently Asked Questions should be uploaded; quicker software technology should be adopted to make the website easily accessible and downloadable. Website information should also contain key information and access to links that make it easy for consumers to access quickly and easily taking into consideration linguistic preferences of consumers, site navigation should also be easy, site design should be attractive and appealing.

- Clarity: Self service options were not useful in handling customer queries and customers did not visit blogs to share information about service experiences. It is evident that customers are not too tech savvy and still prefer doing business using conservative methods. It is suggested that although it is important for the organisation to be familiar with modern technology in terms of doing business, not to ignore conventional methods of sharing information with customers either. The majority of customers still use these conservative methods to do business. Strike a balance between old and new forms of communication such as through blogs and conventional newsletters such that you still reach both target audiences timeously.

- **Infrastructure**

In terms of customers’ perceptions of the influence of the sub-dimension of Infrastructure on call centre effectiveness, the following recommendations are suggested:
Waiting lines: Long waiting lines deterred customers from calling the call centre and customers feel like the call centre is not coping with the demands placed on it by customers. This can be overcome by employing more agents to reduce the agent-to-customer ratios. In doing so, the call talk time can also be reduced as well as average time in the queue before a call can be answered because there are more agents available to manage the lines which mean greater throughput rates. Consider operating the call centres over a 24 hour period as opposed to only during office hours to cope with the increasing demands. Consider implementing toll free lines.

Ease of communication (attention): Customers felt that agents are not able to maintain a good level of concentration on their query at any time of the day and the customers find it difficult to communicate with agents in the call centre. It is suggested that agents work in smaller teams, allowing for more breaks in between shifts as opposed to working a long eight hour shift. A short ten minute break every two and a half hours improves concentration and attention and enhances communication between agents and customers.

The aforementioned recommendations for enhancing call centre effectiveness based on the results of customers’ perceptions are graphically presented in Figure 8.1.
8.3 Recommendations for Future Research

A managerial perspective would contribute significantly to the current body of knowledge in terms of the study as the current study assesses the effectiveness of the call centre from the perspective of the call centre agent and the customer.

A longitudinal study rather than a cross sectional study should also be undertaken in the future assessing the effectiveness of the call centre in managing customers and their needs once the necessary changes have been effected to assess if it has had any effects on productivity.

The current study was conducted among inbound call centre agents only and it will be interesting to see if similar findings are generated among agents employed in outbound call centres.

The current study was undertaken in a Public sector call centre organisation. Future studies should include the private sector, particularly the financial services sector, to ascertain what factors impact on call centre effectiveness and to generate a model for enhancing call centre effectiveness in the private sector.

8.4 Conclusion

This chapter has presented a comprehensive set of recommendations based on the sub-dimensions of each of the key dimensions impacting on call centre effectiveness from the call centre agents’ and customers’ perspective.

The recommendations were based on the key findings of the study as well as on related research undertaken in the field by other researchers. Customer relationship management and services marketing are very dynamic and ever changing in today’s business world and businesses that fail to embrace it risk losing valuable customers. As highlighted earlier, the cost of bringing in new customers is very expensive as opposed to retaining existing customers. Therefore, it makes logical sense for firms to gain a competitive edge by
acquiring valuable information about customers and forging and maintaining long term positive relationships with these customers.

Based on the recommendations of the study, a model has been compiled for practitioners and other stakeholders, which when implemented has the potential to enhance call centre effectiveness (Figure 8.1).
REFERENCES


APPENDIX 1

QUESTIONNAIRE (CALL CENTRE AGENT)

UNIVERSITY OF KWAZULU-NATAL
SCHOOL OF MANAGEMENT

Dear Respondent,

PhD Research Project

Researcher: Devina Oodith (031 2607850)
Supervisor: Prof. S. Brijball – Parumasur (031 2607176)
Research Office: Ms P Ximba (031 2603587)

I, Devina Oodith am a PhD candidate, in the School of Management, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled: The Effectiveness of the Call Centre in Managing Customers and their Needs. The aim of this study is to investigate the service environment within the call centre of the organization and its effectiveness in successfully managing customers and their needs.

Through your participation I hope to understand the relationship between the variables of human resource, technology, infrastructure/sick building and customer expectations of service on managing customers and their needs. The results of the survey are intended to draw conclusions and make recommendations to improvements in customer service delivery and to ensure that a greater level of customer satisfaction is attained through the service process.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Management, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 15-20 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigator: D. Oodith Date: 01 June 2011
CONSENT

I……………………………………………………………………………………..(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.
I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT DATE

________________________ ________________
SECTION A: BIOGRAPHICAL DETAILS

Please answer all of the following questions below by marking a cross (x) alongside the box that best describes you.

1. Gender
   Male  
   1  
   Female  
   2

2. Age
   20 – 29  
   1  
   30 – 39  
   2  
   40 – 49  
   3  
   50 – 59  
   4  
   60 and over  
   5

3. Race
   Black  
   1  
   White  
   2  
   Indian  
   3  
   Coloured  
   4

4. Tenure (How long have you been employed in the call centre?)
   1 month – 11 months  
   1  
   1 year – 3 years  
   2  
   4 years – 6 years  
   3  
   7 years and over  
   4
5. Highest Educational Qualification attained

Primary school (up to Standard 5/grade 7) 1
High School (up to Standard 10/grade 12) 2
Diploma 3
Degree 4
Postgraduate degree 5

6. Employment status

Full Time 1
Part Time 2

7. Number of calls taken per day: ________________

8. Average call waiting time: ________________

9. Call abandonment rates: ________________

10. Call talk time: ___________________________

11. Call wrap-up time: _______________________

12. Time taken in queue before a call is answered:

______________________________
### SECTION B: Human Resources

Please indicate your response to each question by marking a cross (x) in the appropriate column using the scale ranging from strongly disagree (1); disagree (2); neutral (3); agree (4) and strongly agree (5).

<table>
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<th>NO.</th>
<th>STATEMENT</th>
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<tbody>
<tr>
<td>1.</td>
<td>I have received adequate telephone etiquette training to help me communicate with customers.</td>
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<td>2.</td>
<td>I have been taught how to handle confrontational customers.</td>
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<td>3.</td>
<td>I have been provided with comprehensive manuals containing sufficient information to be able to handle complaints or queries efficiently.</td>
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<td>4.</td>
<td>The specified time period within which to handle a call is realistic.</td>
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<td>5.</td>
<td>I fully understand the daily targets that need to be met by me by the end of the work day.</td>
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<td>6.</td>
<td>I fully understand the responsibilities associated with my job.</td>
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<td>7.</td>
<td>I have complete flexibility in making decisions when dealing with customers.</td>
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<td>8.</td>
<td>I have complete authority to make decisions to satisfy customer complaints.</td>
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<td>9.</td>
<td>I am pleased with the rewards and recognition I receive when I have performed well.</td>
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<td>10.</td>
<td>I receive on-going training to help me improve my job performance.</td>
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<td>11.</td>
<td>I am not forced to communicate in language I am not comfortable with.</td>
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<td>12.</td>
<td>I work very well under pressure.</td>
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<td>13.</td>
<td>I feel comfortable enough to inform my supervisor when I feel like I am not coping with the pressure.</td>
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<td>14.</td>
<td>I give off my best with every call that I handle.</td>
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<td>15.</td>
<td>In most instances I attempt to resolve a complaint or query on the first attempt in keeping with the first-call resolution principle.</td>
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<td>16.</td>
<td>I am comfortable with using a pre-prepared telephone script which I use when taking a call.</td>
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<td>17.</td>
<td>During a call I prefer to listen more than to talk.</td>
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<td>18.</td>
<td>I am always courteous to all customers.</td>
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<td>19.</td>
<td>Management always gives me good incentives to motivate me to work harder.</td>
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<td>20.</td>
<td>I believe that my salary is market related.</td>
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<td>21.</td>
<td>When I experience mental exhaustion and physical strain it does not hinder my communication with</td>
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<td>NO.</td>
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<tr>
<td>1</td>
<td>I am fully computer literate.</td>
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<td>2</td>
<td>I fully know how to use the software systems adopted in the call centre.</td>
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<tr>
<td>3</td>
<td>I always deal with electronic queries/complaints within 24 hours of receiving them.</td>
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<td>4</td>
<td>I fully understand the software being used.</td>
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<td>5</td>
<td>The software adopted is user-friendly.</td>
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<td>6</td>
<td>The software is fast and reliable.</td>
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<td>7</td>
<td>I rarely encounter customers reporting difficulties using the technology such as the self–service systems offered.</td>
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<td>8</td>
<td>Customers prefer to speak to me rather than use the technology to serve themselves.</td>
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<tr>
<td>9</td>
<td>Internet service allows customers to address their query/complaint more independently.</td>
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<td>10</td>
<td>I have noticed that web based e-services are more effective for addressing customer needs than talking to an agent.</td>
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**SECTION C: TECHNOLOGY**

Please indicate your response to each question by marking a cross (x) in the appropriate column using the scale ranging from strongly disagree (1); disagree (2); neutral (3); agree (4) and strongly agree (5).
11. Web based communication facilitates communication between the firm and the customer better than an agent.

12. Despite the long waiting lines customers prefer to wait and speak to me.

**SECTION D: INFRASTRUCTURE / SICK BUILDING SYNDROME**

Please indicate your response to each question by marking a cross (x) in the appropriate column using the scale ranging from strongly disagree (1); disagree (2); neutral (3); agree (4) and strongly agree (5).

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<tbody>
<tr>
<td>1.</td>
<td>I enjoy working in an open-plan office space.</td>
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<td>2.</td>
<td>I prefer working out of my own office.</td>
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<td>3.</td>
<td>The layout of the office allows me to communicate easily among other agents.</td>
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<td>4.</td>
<td>My workstation is spacious enough to allow me to perform my work efficiently.</td>
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<td>5.</td>
<td>My workspace is well lit.</td>
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<td>6.</td>
<td>The office is always well ventilated at all times.</td>
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<td>7.</td>
<td>The temperature is constantly suitable in the office (doesn’t get too hot or cold).</td>
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<tr>
<td>8.</td>
<td>The bright lights allow me to work well.</td>
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<tr>
<td>9.</td>
<td>I am able to concentrate well despite the noise from the office.</td>
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<td>10.</td>
<td>I am able to concentrate despite the noisy office equipment such as printers.</td>
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<tr>
<td>11.</td>
<td>The layout of the office allows me to perform my job well.</td>
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<td>12.</td>
<td>I am always surrounded by a fresh supply of air.</td>
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<tr>
<td>13.</td>
<td>I enjoy working in my office as it is a smoke-free zone.</td>
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<td>14.</td>
<td>I love the presence of indoor plants that surround my workstation.</td>
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<tr>
<td>15.</td>
<td>My office chair is very comfortable and easily adjustable.</td>
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<td>16.</td>
<td>My workstation equipment allows me to perform my job easily.</td>
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<td>17.</td>
<td>Laser copiers and printers are placed away from individuals but are not inconvenient for me to access.</td>
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<td>18.</td>
<td>Conditions in my work environment such as bright computer screens and bright lighting does not cause headaches and eye strains nor hinder my performance.</td>
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<td>19.</td>
<td>My office layout has no negative implications on my health.</td>
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<tr>
<td>20.</td>
<td>Performing my job has had no ill effects on my health.</td>
<td></td>
<td></td>
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<tr>
<td>21.</td>
<td>I am at work regularly to ensure that my absence does not overburden other agents.</td>
<td></td>
<td></td>
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<tr>
<td>22.</td>
<td>I am pleased with the general cleanliness of the office space.</td>
<td></td>
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<td>23.</td>
<td>My workstation is ergonomically designed.</td>
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</tbody>
</table>
24. Décor of the workstation is aesthetically pleasing to produce a functional environment.

25. The cafeteria contributes to a relaxed environment.

SECTION E: CUSTOMERS

Please indicate your response to each question by marking a cross (x) in the appropriate column using the scale ranging from strongly disagree (1); disagree (2); neutral (3); agree (4) and strongly agree (5).

<table>
<thead>
<tr>
<th>NO.</th>
<th>STATEMENT</th>
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<tbody>
<tr>
<td>1.</td>
<td>I find that customers are always polite.</td>
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<tr>
<td>2.</td>
<td>I take time to listen to the customer’s viewpoint.</td>
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<tr>
<td>3.</td>
<td>I am able to easily manage hostile/irate customers.</td>
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<tr>
<td>4.</td>
<td>I am able to easily understand what customers are saying or asking of me.</td>
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<tr>
<td>5.</td>
<td>I find that customer expectations of me are realistic.</td>
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<tr>
<td>6.</td>
<td>The customer often furnishes me with adequate information for me to assist them with their query/complaint immediately.</td>
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<tr>
<td>7.</td>
<td>I always follow-up with customers to ensure that they are fully satisfied with my service.</td>
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<tr>
<td>8.</td>
<td>I always strive to satisfy all my customers.</td>
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<tr>
<td>9.</td>
<td>Customers are very cooperative when talking to me.</td>
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<tr>
<td>10.</td>
<td>I am often thanked by customers who appreciate my efforts.</td>
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</tr>
</tbody>
</table>

Thank you for your co-operation and time in completing this document.
Dear Respondent,

PhD Research Project

Researcher: Devina Oodith (031 2607850)
Supervisor: Prof. S. Brijball – Parumasur (031 2607176)
Research Office: Ms P Ximba (031 2603587)

I, Devina Oodith am a PhD candidate, in the School of Management, at the University of KwaZulu-Natal. You are invited to participate in a research project entitled: The Effectiveness of the Call Centre in Managing Customers and their Needs. The aim of this study is to investigate the service environment within the call centre of the organization and its effectiveness in successfully managing customers and their needs.

Through your participation I hope to understand the relationship between the variables of human resource, technology, infrastructure/sick building and customer expectations of service on managing customers and their needs. The results of the survey are intended to draw conclusions and make recommendations to improvements in customer service delivery and to ensure that a greater level of customer satisfaction is attained through the service process.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the School of Management, UKZN.

If you have any questions or concerns about completing the questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed above.

The survey should take you about 15-20 minutes to complete. I hope you will take the time to complete this survey.

Sincerely

Investigator: D. Oodith

Date: 01 June 2011
CONSENT

I………………………………………………………………………………………………(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT __________________________
DATE __________________________
**SECTION A: BIOGRAPHICAL DETAILS**

Please answer all of the following questions below by marking a cross (x) alongside the box that best describes you.

1. **Gender**
   - Male 1
   - Female 2

2. **Age**
   - 20 – 29 1
   - 30 – 39 2
   - 40 – 49 3
   - 50 – 59 4
   - 60 and over 5

3. **Race**
   - Black 1
   - White 2
   - Asian 3
   - Coloured 4

4. **Highest educational qualification**
   - Primary school (up to standard 5/grade 7) 1
   - High school (up to standard 10/grade 12) 2
   - Diploma 3
   - Degree 4
   - Postgraduate degree 5
### SECTION B: Human Resources

Please indicate your response to each question by ticking in the appropriate column with the scale ranging from strongly disagree 1; disagree 2; neutral 3; agree 4 and strongly agree 5.

<table>
<thead>
<tr>
<th>NO.</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Agents are always friendly and courteous.</td>
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<tr>
<td>2.</td>
<td>Agents are extremely efficient in handling my needs.</td>
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<tr>
<td>3.</td>
<td>I find that communicating with the agent is always simple.</td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>The agents are very knowledgeable in terms of handling my query or complaint.</td>
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<tr>
<td>5.</td>
<td>The agent tries hard to resolve my query/complaint promptly.</td>
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<tr>
<td>6.</td>
<td>I can clearly understand what the agent is telling me.</td>
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<tr>
<td>7.</td>
<td>I am often impressed by the level of attention that the agent displays in attempting to assist me.</td>
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<tr>
<td>8.</td>
<td>I am seldom transferred to different agents none of whom can assist with my query.</td>
<td></td>
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<tr>
<td>9.</td>
<td>The agent always follows up to check if I am satisfied with their service performance.</td>
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<tr>
<td>10.</td>
<td>The agent welcomes feedback on how to improve his/her level of service delivery.</td>
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</table>

### SECTION C: Customer Service

Please indicate your response to each question by ticking in the appropriate column with the scale ranging from strongly disagree 1; disagree 2; neutral 3; agree 4 and strongly agree 5.

<table>
<thead>
<tr>
<th>NO.</th>
<th>STATEMENT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Due to the good reputation of the firm I always expect a high level of service delivery.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>The level of service that I receive from the call centre is always reliable.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td>My query/complaint is handled promptly.</td>
<td></td>
<td></td>
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<td>4.</td>
<td>I prefer using the call centre because it is easy to access and make contact with an agent.</td>
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<tr>
<td>5.</td>
<td>I appreciate that the firm always invites me to participate in customer satisfaction surveys.</td>
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<tr>
<td>6.</td>
<td>The firm always strives to exceed my expectations of them in terms of service delivery.</td>
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</tbody>
</table>
7. I feel like a valued customer of this firm.  
8. I do not hesitate to bring it to the attention of the firm when their services are poorly executed.  
9. I discuss my service experiences received by the firm with family and friends.  
10. A service failure by the firm will not cause me to terminate doing business with them in future.  
11. Complaints via the call centre are often less costly for me.  
12. I have an obligation to the firm to complain if I am unhappy with its service.  
13. If my query/complaint is not resolved favourably then I am inclined to switch to another service provider.  
14. The firm strives to resolve my query/complaint favourably.  
15. The compensation that I received for inferior services was fair and equitable.  
16. I have received assurance that the call centre of the firm is dedicated to ensuring my satisfaction.  
17. The call centre of the firm strives to strengthen and build loyal associations with me.  
18. The service guarantees offered by the call centre of the firm are fair.  
19. The call centre of the firm offers me good incentives to keep doing business with them.

**SECTION D: Technology**

Please indicate your response to each question by ticking in the appropriate column with the scale ranging from strongly disagree 1; disagree 2; neutral 3; agree 4 and strongly agree 5.

<table>
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<tr>
<th>NO.</th>
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<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>I find it easy to use the Interactive Voice Response (IVR) software when I contact the call centre.</td>
<td></td>
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<tr>
<td>2.</td>
<td>The self service options are quick and easy to use.</td>
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<tr>
<td>3.</td>
<td>The self service options are useful in assisting with handling my queries.</td>
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<tr>
<td>4.</td>
<td>Calling the call centre is as effective as using the self service options such as e-mail and internet.</td>
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<tr>
<td>5.</td>
<td>The firm’s website is user-friendly.</td>
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<tr>
<td>6.</td>
<td>I can often access important information from the informative web page.</td>
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<tr>
<td>7.</td>
<td>The risk of fraud and violation of privacy does not</td>
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</tbody>
</table>

liii
hinder my online communications.

8. The website has a useful frequently-asked-questions (FAQ’s) database.

9. The personality of the website is friendly and welcoming.

10. The website has useful links that are easy to access.

11. As there is no means of complaining if I have received poor service due to self service technology, I avoid using this service in favour of the call centre.

12. The firm updates their self service technology regularly.

13. I prefer to have human contact rather than use self service technology.

14. I frequently visit blogs to share information about my service encounter with the firm.

**SECTION E: INFRASTRUCTURE**

Please indicate your response to each question by ticking in the appropriate column with the scale ranging from strongly disagree 1; disagree 2; neutral 3; agree 4 and strongly agree 5.

<table>
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<tr>
<th>NO.</th>
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<tbody>
<tr>
<td>1.</td>
<td>The long waiting lines do not deter me from calling the call centre.</td>
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<tr>
<td>2.</td>
<td>Indications in my interactions with the call centre are</td>
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<td></td>
<td>that it is coping with the demands placed by customers.</td>
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<td>3.</td>
<td>My connections are always disrupted when logging onto the website.</td>
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<td>4.</td>
<td>Call centre agents are able to maintain the level of</td>
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<tr>
<td></td>
<td>concentration on my query at any time of the day.</td>
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<tr>
<td>5.</td>
<td>I find that call centre agents provide me with accurate</td>
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<td></td>
<td>information with regards to my query.</td>
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<tr>
<td>6.</td>
<td>I have seldom encountered situations where the call centre agent</td>
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<td></td>
<td>complains about the speed of software navigation.</td>
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<tr>
<td>7.</td>
<td>I have seldom encountered situations where the call centre agent</td>
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<td></td>
<td>complains about office atmosphere (lighting, layout and ventilation).</td>
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<tr>
<td>8.</td>
<td>My communication with the call centre agent is not</td>
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<td></td>
<td>interrupted by background noise in the call centre environment.</td>
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</table>

Thank you for your co-operation and time in completing this document.
APPENDIX 3

21 June 2011

Ms. D Oodith (9600215)
School of Management

Dear Ms. Oodith,

PROTOCOL REFERENCE NUMBER: HSS/0322/011D
PROJECT TITLE: 'The Effectiveness of the Call Centre in Managing Customers and their Needs.'

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process:

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/ modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully,

[Signature]
Professor Steven Collings (Chair)
HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc. Supervisor – Prof. S. Brijball - Parumasur
cc. Mrs. C Haddon