



CUSTOMER PERCEPTIONS OF SERVICE DELIVERY: A CASE STUDY AT TRANSNET PORT TERMINAL, PIER2

By

Ntomb'zenhlanzeko Cele

Student number: 20102972

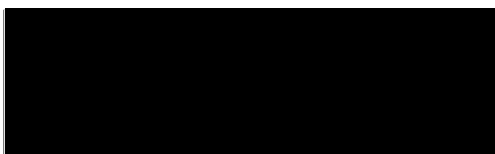
Dissertation submitted in fulfilment of the requirements for the Degree of
Master of Management Sciences specialising in Business Management

Department of Entrepreneurial Studies and Management

Durban University of Technology

Durban, South Africa

APPROVED FOR FINAL SUBMISSION



Supervisor: Dr M. Noor Davids (PhD)

15/04/2018

Date

DECLARATION

I, Ntomb'zenhlanzeko Cele, hereby declare that this dissertation is original and all the materials used are appropriately acknowledged and explicitly referenced. A bibliography is appended to the dissertation.

I also certify that the dissertation has not heretofore been submitted in any of its parts or entirety for a degree in any other institution of higher learning locally or internationally.

I hereby give permission for my work to be available for photocopying and/or re-printing, for inter-library loan, and for the title and abstract of this dissertation to be made available to other educational institutions and students.

Ntomb'zenhlanzeko Cele

Date

DEDICATION

I would like to dedicate this thesis to my late father, Michael Mfanafuthi Maphumulo, (may his soul forever rest in peace) for raising me to be the person that I am today. I deeply believe that I have been able to achieve most of what I have achieved through his encouragement, support and always reminding me that the sky is the limit.

Mashimane, I am proud of having you as my father.

ACKNOWLEDGEMENTS

I would like to express my gratitude to the following individuals who enabled me to complete this dissertation:

- Dr M. Noor Davids, my supervisor, for his guidance and encouragement – thank you for your patience.
- To my mother, MaHlengwa – thank you for your inspiration and prayers.
- To my three boys, Ndumiso, Alethokuhle and Aphiwokuhle – this is partly for you to prove that you can achieve anything you set your mind to.
- To my brother and sisters – thank you for your encouragement.
- Finally, my sincere appreciation goes to all those who have assisted me and have not been mentioned – I thank you.

ABSTRACT

In 1877 the Durban Container Terminal (DCT) was developed as a container-only terminal. In recent years, investment in the terminal infrastructure at the DCT has increased and now the terminal accounts for 65% of all South Africa's container imports and exports and is the busiest terminal in Africa. The DCT has easy access to the main road corridor between Durban and Johannesburg, which is South Africa's greatest economic contributor.

As demand increases, productivity and efficiency become more important, yet the terminal faces its ever unprecedented challenge which is space. A dedicated facility for the staging of container road trucks has been constructed. This facility is designed to eliminate road truck congestion at the entrance roadway to the terminal. The staging area contributes to the quality and speed of productivity in the terminal. At the core of the terminal's success is its productivity. One of the productivity measures that are closely monitored is Truck Turnaround Time (TTT).

The aim of this study was to analyse customers' perceptions of service quality delivered at the Durban Container Terminal. The SERVQUAL instrument which is based on five dimensions, namely reliability, tangibles, responsiveness, empathy and assurance was used to assess customer perception and expectation of service quality. A gap analysis was used to evaluate gaps in terms of service quality delivered at the terminal. A mixed methodological approach was adopted; thus a quantitative and qualitative study was undertaken. The 111 respondents used in the quantitative study were selected using purposive sampling. Descriptive and inferential statistics were used to analyse data by means of the Statistical Package for the Social Sciences (SPSS). Furthermore, 10 managers from the client base were selected to be interviewed using purposive sampling for the qualitative study. Qualitative data were analysed using content analysis. The data were transcribed and emerging themes identified and presented.

The findings of this study using SERVQUAL illustrate that customer expectations were higher than perception across the entire five service quality dimensions. The results imply that customers were not happy with the level of service being delivered at the terminal on each of the dimensions. With respect to the qualitative study, the

findings show that customers are concerned with the efficiency at the terminal and are not satisfied with the truck turnaround times. Furthermore, the results show that customers are facing challenges in terms of congestion which is compounding problems regarding the waiting time before transporters can access the service. Based on the findings of this study, recommendations have been proposed to close the gaps and ultimately improve service quality so that the terminal is able to achieve customer satisfaction and by implication, improved productivity.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
LIST OF TABLES	xiv
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
CHAPTER 1 INTRODUCTION	17
1.1. INTRODUCTION	17
1.2. CONTEXT OF THE STUDY	17
1.3. PROBLEM STATEMENT	19
1.4. AIM OF THE STUDY	20
1.5. OBJECTIVES OF THE STUDY	20
1.6. RATIONALE FOR THE STUDY	20
1.7. RESEARCH METHODOLOGY	21
1.7.1. Sampling technique	22
1.7.2. Sample size	22
1.7.3. Inclusion and exclusion criteria	22
1.7.4. Recruitment process	23
1.7.5. Data collection	23
1.8. SCOPE OF THE STUDY (DELIMITATION AND LIMITATIONS)	23
1.9. SUMMARY OF CHAPTERS	24
1.10. CONCLUSION	25
CHAPTER 2 SERVICE QUALITY IN A CONTAINER TERMINAL: LITERATURE REVIEW 26	
2.1. INTRODUCTION	26
2.2. CHALLENGES OF SOUTH AFRICAN GOVERNMENT OWNED ENTERPRISE	26

2.3.	THE IMPORTANCE OF THE CUSTOMER	27
2.3.1.	Basic needs of customers	28
2.3.2.	Customer attributes	29
2.4.	MEANING OF SERVICE	29
2.5.	CHARACTERISTICS OF SERVICES	30
2.5.1.	Intangibility	31
2.5.2.	Perishability	32
2.5.3.	Inseparability	32
2.5.4.	Variability	33
2.6.	CUSTOMER EXPECTATIONS	33
2.6.1.	Types of customer expectations	34
2.6.1.1.	Predicted service	34
2.6.1.2.	Desired service	35
2.6.1.3.	Adequate service	35
2.6.2.	Levels of expectations	35
2.6.3.	Techniques for exceeding customers' expectations	36
2.7.	CUSTOMER PERCEPTION	36
2.7.1.	Three factors that shape perceptions	37
2.7.1.1.	Context	37
2.7.1.2.	Customer characteristics	37
2.7.1.3.	Customer interpretation	37
2.7.2.	Three stages of perception process	37
2.7.2.1.	Sensation	38
2.7.2.2.	Organisation	38
2.7.2.3.	Customer interpretation	38
2.8.	SERVICE QUALITY	38
2.8.1.	Service quality dimension	39
2.8.1.1.	Tangibles: Representing the service physically	39
2.8.1.2.	Responsiveness: Willingness to help	39

2.8.1.3. Assurance: Instilling trust and confidence	40
2.8.1.4. Reliability: Delivering on promises	40
2.8.1.5. Empathy: Treating customers as individuals	40
2.9. MEASURING SERVICE QUALITY USING THE SERVQUAL	40
2.9.1. Gap 1: Consumer expectation and management perception	42
2.9.2. Gap 2: Management perception and service-quality specification	43
2.9.3. Gap 3: Service-quality specifications and service delivery	43
2.9.4. Gap 4: Service delivery and external communication	44
2.9.5. Gap 5: Perceived service and expected service	44
2.10. PRACTICAL EVIDENCE OF THE SERVQUAL INSTRUMENT	45
2.11. CRITICISM OF THE SERVQUAL INSTRUMENT	46
2.12. CUSTOMER SERVICE	48
2.12.1. Customer satisfaction	49
2.12.2. Customer satisfaction and service quality as related concepts	50
2.12.3. Customer devotion	51
2.12.4. Aspects that lead to customer devotion	52
2.13. CUSTOMER RETENTION AND BUILDING LONG VENTURES	53
2.14. CONCLUSION	54
CHAPTER 3 RESEARCH METHODOLOGY	56
3.1. INTRODUCTION	56
3.2. RESEARCH PHILOSOPHY AND PARADIGM	56
3.3. RESEARCH DESIGN	57
3.4. QUANTITATIVE RESEARCH	57
3.5. QUALITATIVE RESEARCH	58
3.6. TARGET POPULATION	58
3.7. SAMPLING	58
3.7.1. Sample size	59
3.7.2. Sampling technique	59
3.8. INCLUSION CRITERIA	59
3.9. EXCLUSION CRITERIA	60
3.10. RECRUITMENT PROCESS	60

3.11.	DATA COLLECTION	60
3.12.	DATA COLLECTION FOR THE QUANTITATIVE STUDY	60
3.13.	DATA COLLECTION FOR THE QUALITATIVE STUDY	60
3.14.	DATA ANALYSIS	61
3.14.1.	Descriptive statistics	61
3.14.2.	Inferential statistics	61
3.14.3.	Cronbach's alpha	61
3.15.	PILOT TESTING AND PRE-TESTING	62
3.16.	DELIMITATIONS	63
3.17.	CONFIDENTIALITY AND ANONYMITY	64
3.18.	VALIDITY AND RELIABILITY	64
3.19.	ETHICAL CONSIDERATIONS	65
3.20.	CONCLUSION	65
CHAPTER 4	DATA ANALYSIS AND DISCUSSION OF FINDINGS	66
4.1.	INTRODUCTION	66
4.2.	THE SAMPLE	66
4.3.	THE RESEARCH INSTRUMENT	66
4.4.	DESCRIPTIVE STATISTICS	67
4.4.1.	Demographics characteristics of the sample	67
4.4.2.	Gender	67
4.4.3.	Age	68
4.4.4.	Cross-tabulation	68
4.4.5.	Educational qualification level	70
4.4.6.	Frequency of visits to the terminal	70
4.4.7.	Frequency of most regular transaction	71
4.5.	GOODNESS OF THE DATA	72
4.5.1.	Reliability statistics	72
4.5.2.	Validity	73
4.5.3.	Factor analysis	74
4.5.4.	Rotated component matrix	75
4.6.	SERVICE QUALITY DIMENSIONS' ANALYSIS WITH GAP SCORES	78

4.6.1. Dimension: Tangibles	78
4.6.1.1. The computer system used is fast and easy to understand	79
4.6.1.2. Customers experience easy process flow when they visit the terminal	79
4.6.1.3. The physical layout of the terminal is convenient and reduces delays	79
4.6.2. Dimension: Empathy	80
4.6.2.1. Employees are responsive to customer questions and complaints	80
4.6.2.2. Customers are treated with respect on arrival at the terminal	81
4.6.2.3. Employees are caring and make one feel like a valued customer	81
4.6.3. Dimension: responsiveness	81
4.6.3.1. Employees are willing to help and follow up on a customer problem until it is resolved	82
4.6.3.2. Important information is always shared with customers on time	82
4.6.3.3. There are always enough machines to service drivers no matter how busy it is	83
4.6.4. Dimension: Assurance	83
4.6.4.1. Customers feel safe and secure when in the terminal	84
4.6.4.2. Employees are professional and knowledgeable when assisting customers	84
4.6.4.3. Customers always feel confident that they will get assistance if there is a problem	84
4.6.5. Dimension: Reliability	85
4.6.5.1. Customers experience quick turnaround time when in the yard	85
4.6.5.2. The terminal consistently delivers on promised outputs	86
4.6.5.3. The terminal is reliable in meeting operational targets which reduces container dwell time	86
4.6.5.4. Overall mean scores for service quality dimensions (Expectation vs perception)	87
4.7. QUALITATIVE ANALYSIS	88
4.7.1. How efficiently are your queries resolved?	88
4.7.2. How satisfied are you with your truck's turnaround time?	89

4.7.3.	What challenges do you often come across when transacting at the container terminal?	90
4.7.4.	What would you say is the level of service quality at the container terminal?	90
4.7.5.	Would you say the container terminal lives up to the promises made to you, the customer?	91
4.7.6.	What would you change about the quality of service received at the container terminal?	92
4.8.	CONCLUSION	92
CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS		94
5.1.	INTRODUCTION	94
5.2.	SUMMARY OF THE THEORETICAL STUDY	94
5.3.	SUMMARY OF THE EMPIRICAL STUDY	95
5.4.	DISCUSSION ON ACHIEVEMENT OF RESEARCH OBJECTIVES	95
5.4.1.	Investigate customers' expectations of services rendered at a container terminal	95
5.4.2.	Ascertain customers' perception of services rendered at a container terminal	96
5.4.3.	To evaluate gaps between expectation and perception of service delivery at the container terminal	96
5.4.4.	To analyse customers' experiences of services rendered at a container terminal through a qualitative approach	97
5.5.	RECOMMENDATIONS	97
5.5.1.	Appointment booking system	97
5.5.2.	Shift changeover	97
5.5.3.	Computer screens	98
5.5.4.	Tangibles	98
5.5.5.	Providing staff with knowledge	98
5.5.6.	Responsiveness to customer complaints	98
5.5.7.	Reliability	99
5.5.8.	Empathy	99

5.6.	LIMITATIONS OF THE STUDY	99
5.7.	RECOMMENDATION FOR FURTHER RESEARCH	99
5.8.	CONCLUSION	100
	LIST OF REFERENCES	101
	ANNEXURE 1: LETTER OF INFORMATION	112
	ANNEXURE 2: LETTER OF PERMISSION TO CONDUCT RESEARCH	113
	ANNEXURE 3: INTERVIEW QUESTIONNAIRE (QUALITATIVE STUDY)	114
	ANNEXURE 4: THE SERVQUAL QUESTIONNAIRE	115
	ANNEXURE 5: APPROVAL TO CONDUCT RESEARCH-GATEKEEPERS LETTER	117
	ANNEXURE 6: EDITING CERTIFICATE	116

LIST OF TABLES

Table 4.1: Cross-tabulation of the respondents' age and gender	69
Table 4.2: Reliability statistics	73
Table 4.3: Expected KMO and Bartlett's test	75
Table 4.4: Perceived KMO and Bartlett's test	75
Table 4.5: Rotated component matrix	77
Table 4.6: Overall mean scores per dimension	88

LIST OF FIGURES

Figure 1.1: Durban Container Terminal (DCT) Pier 2 – Transnet Durban Port	17
Figure 1.2: Terminal operator performance standard (TOPS): Systematic performance model	18
Figure 2.1: Characteristics of services	31
Figure 2.2: Factors influencing customer expectations	34
Figure 2.3: The SERVQUAL Gap Analysis Model	42
Figure 2.4: Gap 5: The customer gap	45
Figure 4.1: Frequency distribution – Gender	67
Figure 4.2: Frequency distribution – Age	68
Figure 4.3: Frequency distribution – Highest educational qualification	70
Figure 4.4: Frequency of visits to the terminal	71
Figure 4.5: Frequency of most regular transaction	72
Figure 4.6: Mean scores for tangibles: Expectations vs perceptions	78
Figure 4.7: Mean scores for empathy: Expectation vs perceptions	80
Figure 4.8: Mean scores for responsiveness: Expectations vs perceptions	82
Figure 4.9: Mean scores for assurance: Expectations vs perceptions	83
Figure 4.10: Mean scores for reliability: Expectations vs perceptions	85

LIST OF ABBREVIATIONS

ASQ	American Society of Quality
ATS	Academic Technology Services
DCT	Durban Container Terminal
KMO	Kaiser-Meyer-Olkin
SADC	Southern African Development Community
SERVQUAL	quantitative instrument measuring service quality
TOPS	Terminal operator performance standard
TTT	Truck Turnaround Time
TWT	Truck Waiting Time

CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION

This chapter presents an overview of this study. To this end, the chapter unfolds as follows: the context of the study, the problem statement that this study addressed, the main objectives and rationale of the study, an overview of the methodology adopted and the chapter division of this dissertation.

1.2. CONTEXT OF THE STUDY

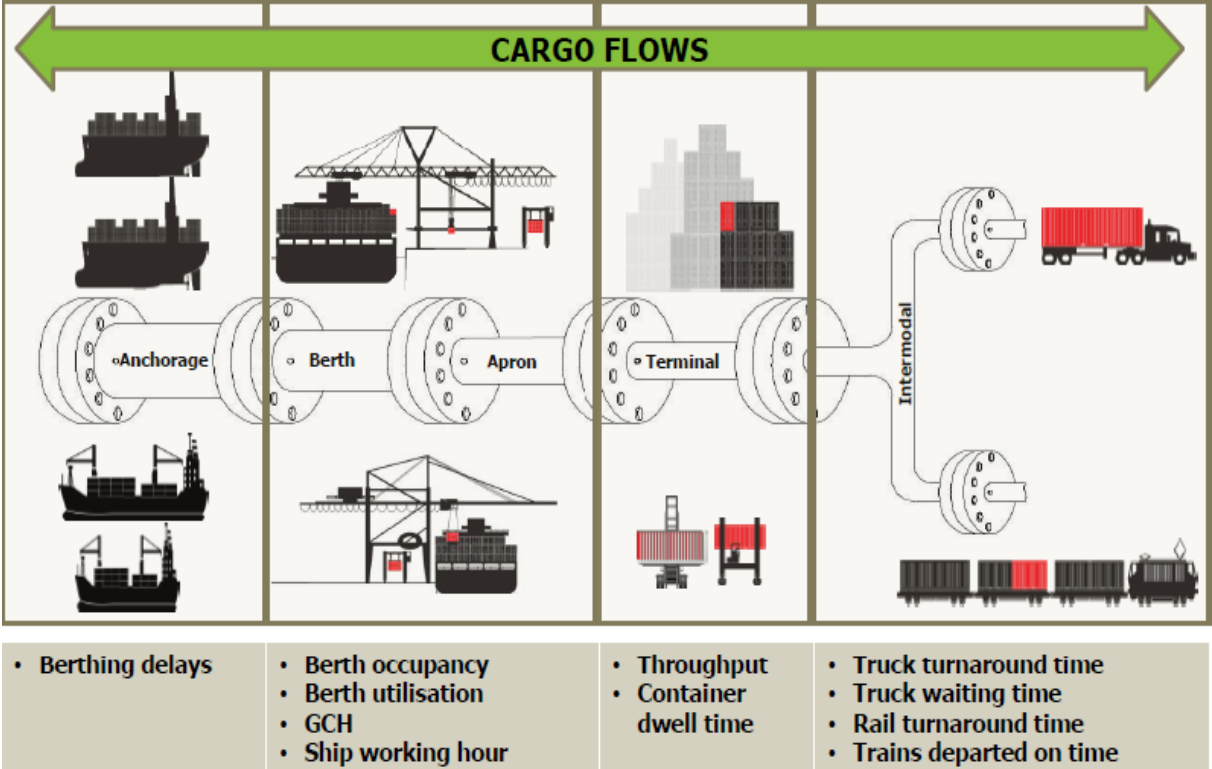
In 1877, Durban Container Terminal (DCT) Pier2, shown in Figure 1.1, was developed as a container-only terminal. In recent years, investment in terminal infrastructure at the DCT in both Pier1 and Pier2 has increased and today the terminal accounts for 65% of all South Africa's container imports and exports and is the busiest terminal in the country. The terminal, owned by Transnet, has easy access to the main road corridor between Durban and Johannesburg. With vessels growing larger over the decades, widening and deepening of the entrance channel became a necessity (Transnet, 2017).



Figure 1.1: Durban Container Terminal (DCT) Pier 2 – Transnet Durban Port

Source: Picture by researcher, 2017.

Transnet is a state owned enterprise which means it is a public company that is wholly-owned by the government. It is a focused freight transport company, delivering integrated, efficient, safe and cost-effective services to promote economic growth in South Africa. This is to be achieved by increasing the company’s market share for freight on rail, improving productivity and profitability and by providing appropriate capacity to customers ahead of demand. As shown in Figure 1.1, cargo handling services such as cranes loading and offloading containers from trucks or vessels are provided. Storage and value-add services are also provided to a wide spectrum of customers in shipping. These services include stuffing and de-stuffing of containers and provision of container empty top-up stacks. The DCT’s most recent focus is to grow in the supply chain. This means that the port has to prepare for the growth in its hinterland activities as well (Transnet, 2014:6-7).



**Figure 1.2: Terminal operator performance standard (TOPS):
Systematic performance model**

Source: Ports Regulators of South Africa, 2015:5.

Several companies, both large multinational corporations and small business enterprises from the Southern African Development Community (SADC) and beyond, import raw materials, products, ingredients, components or goods to this country.

Figure 1.2 highlights the movement of trucks from the time of arrival, to berthing and operations and moving out of the terminal. The truck turnaround time is used as a proxy for how well the DCT is operating. Figure 1.2 further shows the strategic points of the journey where performance is evaluated through time indicators. One of the main functions of the DCT is reception and delivery of containers at the terminal. Thus, the daily running of the facility depends on the bringing in and taking out of containers at the terminal. The shipping line relies very much on transporters to deliver containers within the planned window to be able to meet the vessel targets as set out in the operational goals of the terminal. The transporter is not the direct customer to the terminal but drives the operations at the terminal. Scheduling the departure and arrival times of vessels is an important aspect in the management of the DCT such that a delay in bringing in a container by the transporter means a delay in loading the container onto the planned truck, thus delaying the truck departure which is the basis for measuring the effectiveness of the terminal (Ports Regulators of South Africa, 2015:5; Transnet, 2017).

For the purpose of this study, the focus was on hinterland operations, thus the transporters/trucks. The emphasis was based on how satisfied the transporters are with the service being delivered at the terminal. As highlighted in Figure 1.2, the overall terminal performance depends on the Truck Turnaround Time (TTT) of trucks that come to drop off (exports) and pick up (imports) at the terminal. It is important to highlight that there are many aspects that determine the effectiveness and performance of a port terminal but TTT is generally regarded as a major performance indicator. The point of intermodal exchange of cargo is used to measure the TTT and Truck Waiting Time (TWT) (Ports Regulators of South Africa, 2015:5). Therefore, this study aimed to assess customer perception of service quality delivered at the terminal. This customer service investigation into the experiences of the DCT users took the form of a case study design in which the phenomenon under investigation was customer service and the case was the DCT because the study comprised how the phenomenon is manifested at the DCT.

1.3. PROBLEM STATEMENT

Zeithaml, Bitner and Gremler (2006:141) stated that if a service provider does not conduct market research on customer expectation and perception, it may become

difficult to meet customer requirements or needs. While the literature emphasises the performance of shipping vessels and how terminals can be improved from a construction perspective, research on customer service experience is less prevalent.

1.4. AIM OF THE STUDY

The aim of a study is described in broad terms and the objectives are more specific. The aim of this study was to assess customer perception of service delivery at the container terminal in Durban. This was achieved by conducting an investigation into the customer service experiences of transporters. The findings of this study will be used to make recommendations for the improvement of customer service and thereby contributing towards improving the management and function of the DCT.

1.5. OBJECTIVES OF THE STUDY

The following objectives were derived for this study:

- To investigate customers' expectations of services rendered at a container terminal.
- To ascertain customers' perception of services rendered at a container terminal.
- To evaluate gaps between expectation and perception of service delivery at the container terminal.
- To analyse customer experiences of the service rendered at the container terminal through a qualitative approach.

1.6. RATIONALE FOR THE STUDY

The South African Government has embarked on a massive infrastructure drive to boost the national economy, create jobs and alleviate poverty (Transnet, 2017). With this in mind, service quality is crucial for the success of the business and plays a significant role in achieving a competitive advantage. Because of the importance of import and export of goods as an integral part of the national economy, Transnet plays a pivotal role in determining its performance. As a state-owned enterprise with this crucial economic function, Transnet has the responsibility to ensure that the DCT functions optimally and that it is managed efficiently. Hence, a consistent monitoring and improvement disposition towards the quality of service rendered to users is

necessary to sustain effectiveness and encourage deep-rooted success for terminals. Timm (2011:3) added that companies that deliver excellent customer service are progressing very well whereas as those that provides poor customer service fumble and collapse. Organisations that are serious about meeting the needs of the customers channel their resources to customer service and ways of improving it.

Service quality is an elusive concept such that the quality delivered or provided today may vary in future, depending on customer service encounters (Siddiqi, 2011:12). Transnet is currently facing delivery challenges in its network and at the same time plans have been put in place to come with mechanism to improve the customer experience. However, this can only be done if the processes are reviewed from the customer's perspective. Thus, it is critical for service providers to frequently assess customers' perception of service quality so that the business processes, such as those currently in force at the terminal, can be reviewed and re-engineered with the view to meet the needs and expectations of the customer. This research could prove useful by contributing towards the improvement of customer service and quality, to discover current problems and to ensure sustainability and encourage deep-rooted success within terminals. The terminal's management team could use the recommendations to craft customer service strategies that will take the terminal to new heights. Customers will also enjoy improved service quality upon implementation of the recommendations, thus resulting in more satisfied customers.

1.7. RESEARCH METHODOLOGY

This study adopted a mixed methodological approach. The mixed method approach encompasses both qualitative and quantitative research techniques. Qualitative research is based on inductive reasoning and is used when the researcher want to understand and discover a new phenomenon and to create ideas (Hair, Money, Page & Samouel, 2007) whereas quantitative research is based on deductive reasoning which commences with a conceptual framework and moves towards specificity which enables the creation of hypotheses for testing (Yin, 2003). For the qualitative study, interviews were conducted with managers who are experts in the field to obtain their perception of customer service at the Durban Container terminal. Furthermore, a service quality instrument, the SERVQUAL was used for the quantitative study to

evaluate customer expectation and perception of customer service at the terminal. SERVQUAL is commonly used in the field of management science and entrepreneurship studies.

1.7.1. Sampling technique

Purposive or judgemental sampling method was used for this study because of its relevance. The purposive sampling technique uses the researcher's discretion to select respondents due to the characteristics they possess. The researcher makes a decision regarding what needs to be known and on that basis to engage respondents who can and are ready to provide the information based on their understanding and experience of the study under investigation (Bernard, 2002, Lewis & Sheppard, 2006). In this study, the participants were familiar with the operations of the DCT, in one way or the other. Given the focus of this study, which is customer service, the respondents were selected from the truck drivers who are frequent users of the facility, and a smaller section of managers with whom the DCT has a close working relationship. These managers were selected based on their expertise and understanding of the intricacies in the operations and management of the DCT.

1.7.2. Sample size

A sample size refers to the numbers of participants or respondents who are the subjects of an investigation (Burns & Bush, 2014). A total of 120 truck drivers were used as respondents for the quantitative study whereas 10 managers from clients of the container terminal were interviewed for the study. For this study, a response rate of 92.5% was achieved (N = 111), which became the basis on which the quantitative data were analysed and presented. As previously mentioned, the managers were carefully selected based on their involvement and knowledge with the DCT. The managers who were interviewed participated eagerly as they realised that the objectives of this study would be of mutual benefit. The truck drivers and managers were surveyed separately.

1.7.3. Inclusion and exclusion criteria

The participants for this study were chosen based on their experience of service delivery at the Durban Container Terminal for the six months prior to the study, for both import and export shipments, such that they were deemed appropriate to

develop informed opinions on customer service at the terminal. Salkind (2010:2) is of the view that a research process that is above board will enhance external and internal validity, credibility, reduce costs and ethical concerns. With respect to exclusion, drivers and managers not from companies based in Durban were excluded from the study for accessibility reasons. A careful selection of participants based on the above-mentioned criteria ensured that the responses to the questionnaire would be relevant and valid to answer the main research questions.

1.7.4. Recruitment process

According to Maxine, Doku and Tennakoon (2003), the recruitment process encompasses the identification and selection of respondents for a study. Thus, in this study, respondents were recruited at the staging area where drivers wait in queues for their turn to process and drive inside the terminal. The drivers were recruited based on their familiarity with the operations of the DCT. Similarly, the top 10 companies who frequently visit the terminal were approached; however, it was up to the company to choose the management representative to be interviewed based on their knowledge and understanding of the operations at the DCT.

1.7.5. Data collection

Quantitative data for the study were collected through administration of the SERVQUAL questionnaire whereas qualitative data were collected through interviews. Questionnaires were distributed to drivers who had agreed to participate in this study. Interviews were conducted with managers representing transportation companies. Transnet organises weekly meeting with managers and the platform was conveniently used to interview the managers after the weekly focus meetings hosted by terminal management. Quantitative data were analysed using descriptive and inferential statistics by means of a statistical package known as the SPSS whereas interviews were transcribed to identify commonly used words, expressions and phrases denoting particular meaning as emerging themes.

1.8. SCOPE OF THE STUDY (DELIMITATION AND LIMITATIONS)

Delimitation is a crucial aspect of a study, especially where a large study population is involved. Delimitations refer to the boundary or scope created by the researcher with respect to the parameters the study (Baron, 2008). The number of potential

participants for the study (population-truck drivers) was large; however, the researcher focused on a study population that was drawn from Durban-based transportation companies.

Drivers of companies based in Durban and only those that use the Durban Container Terminal were used as respondents in the study. Thus, the sample size adopted for this study was small and as such, the findings cannot be generalised to a larger population. However, the findings emerging from the data collected in this study will be of direct value to this company and companies with similar functional and management architectures.

1.9. SUMMARY OF CHAPTERS

Chapter 1: Introduction

This chapter focuses on the introduction, describes the research problem and how the research came about. It focuses on the rationale and objectives of the study. Research methodology, a theoretical framework (SERVQUAL) and the structure of the study are presented.

Chapter 2: Literature Review

This chapter provides an appropriate and succinct literature review of published materials relative to the study to engage topics of common interests and to establish a theoretical foundation for study. This chapter covers service quality literature relating to the importance of customer service; the role played by customer service as part of the company's operations, measures of customer satisfaction; and the importance of customer expectations. The literature review assists in providing a deeper understanding of the problem statement and affirms the relevance of this study as a workplace-related investigation.

Chapter 3: Research Methodology

This chapter describes research design, the difference between quantitative and qualitative methods and how they were employed as complementing each other, the limitation of the research investigation and a description of the sampling method.

Data collection methods used are defined and how the data were analysed is discussed.

Chapter 4: Data Analysis and Discussion of Findings

This chapter presents the analysis of data. Because this study employs two data collection methods, the findings have been presented in two sections separately: questionnaire (quantitative) and interviews (qualitative). Statistical analysis of the data obtained is presented in table form. The data are presented as meaningful results that formed the bases of the findings of this study, which the reader will be able to comprehend. Similarly, the interview themes emerging from the data are presented as findings, which, together with the findings from the questionnaire data, were synthesised into the findings of this study.

Chapter 5: Summary, Conclusions and Recommendations

This chapter discusses the analysis of results presented in the previous chapter. This chapter also puts forward conclusions from the findings related to the literature and highlights the implications of the findings of the study for academic and business use. Furthermore, this chapter contains various recommendations that could be regarded as relevant to the present operations of the case study. Recommendations for future research are suggested.

1.10. CONCLUSION

Chapter 1 presented the background of the study. A detailed discussion of the terminal operations, specifically the truck turnaround times at the terminal as a measure of productivity was provided. It was further noted that terminal services include stuffing and de-stuffing of containers and provision of container empty top-up stacks. The chapter further discussed the problem statement, the rationale of this study, a brief outline of the research methodology undertaken in this study and a summary of the chapters.

The next chapter provides a review of literature on services, service quality, customer satisfaction and the use of the SERVQUAL instrument which served as a theoretical framework in this study.

CHAPTER 2

SERVICE QUALITY IN A CONTAINER TERMINAL: LITERATURE REVIEW

2.1. INTRODUCTION

In Chapter 1, the objectives, the research design, a brief outline of the research methodology and the reasons for the study were discussed. This chapter focuses on the extant literature on service quality and customer satisfaction in a container terminal. The importance and critical factors of customer service in the container terminal are explained. SERVQUAL, the quantitative instrument measuring service quality, is discussed in Sections 2.8, 2.9 and 2.10 before relevant literature on customer service is presented in Section 2.11.

This chapter provides an outline of customer service. The meaning of customer and service and how they are interrelated to each other will be discussed first. The meaning of the customer, its importance, its components and crucial issues concerned with customer service will be explained. This chapter also presents characteristics of services, customer expectation and perception of service and the five service quality dimensions (tangibles, reliability, responsiveness, empathy, assurance) developed by Parasuraman, Zeithaml and Berry (1988:13) which will be used by the port's customers to measure service quality in this study. Furthermore, the gaps model which is a service quality tool used to analyse the differences between expectations and expectations as the determining factor of customer satisfaction is discussed.

2.2. CHALLENGES OF SOUTH AFRICAN GOVERNMENT OWNED ENTERPRISE

South Africa state owned enterprises (SOEs) contributes significant amount of revenues to the government. Previous research has found that state owned enterprises total revenues correspond to 8.7% of GDP. On a sectorial basis, transport (28.8%), followed by energy (27.3%), communications (16.2%), financial services (8.03%), and water (3.61%) account for a significant percentage of revenue generated by state owned enterprises. It was projected that state owned enterprises

gross domestic product contributions are to increase in 2015-16 with large-scale investments planned in the state-dominated infrastructure sector (OECD, 2015).

Despite the massive opportunities available on the market, state owned enterprises continue to face significant challenges that impact on their operations and growth. The composition of board members and powers given to political office bearers such as cabinet ministers has been at the centre of problems and conflicts encountered in state owned companies. There is a tendency by cabinet ministers to make decisions based on the political desires of his or her party rather than on the best interests of the state owned enterprises or what makes operational sense. There is also problem of patronage among board members who are mostly politicians because most of the decisions taken are based on the financial gain they are going to make and thereby raising issues of conflict of interests (Armstrong, 2015).

State owned companies have several problem and challenges. For instance, most of the state owned enterprises don't have enough funds for capitalisation as such they rely on bailouts" from government which are not sustainable means of running an organisation. In addition, it was noted that in South Africa, SOEs there is poor provision of information to shareholders, no code of ethics to ensure stakeholder rights, poor accounting and auditing standards, poor disclosure of risk, less than adequate accountability to government, no annual appraisal of board performance, no provision of clear strategy and direction by the board and poor board attendance (Thomas, 2012).

2.3. THE IMPORTANCE OF THE CUSTOMER

Gerber and Bothma (2008:2) defined a customer as the person who is buying the service. Johnson (1999:15) defined a customer as a business's oxygen supply, as without a customer business will not survive, whereas Harris (2013:4) stated that a customer is a person, company, or entity which buys goods and services produced by another person, company or other entity. A customer is someone or an entity who purchases or rents something from an individual or organisation.

The major customers of the Durban Container Terminal are transporters and shipping lines. In this study, customer refers to all transporters in the greater Durban area who ship containers at the terminal.

2.3.1. Basic needs of customers

Harris (2013:5) explained that the following are the basic needs of all customers:

- **Service:** Customers expect to receive a good service that is considered appropriate for the level of purchase they make. In the context of this study, the customer pays the supplier of service (the DCT) according to a specified rate, for which a particular service is expected. For example, at the DCT, a transporter who has booked a bulk run will expect that his trucks be serviced without any delays or complications when coming to the terminal.
- **Price:** The cost of everything customers purchase is becoming more important. For instance, business-oriented transporters want to use their financial resources as efficiently as possible. This makes the component of price set by the DCT important to the customer.
- **Quality:** Customers expect a service that is functional and durable. They are not bothered by the price of services rendered by a service provider with a good reputation of providing high quality services. For instance, if the DCT can demonstrate that it is a facility that provides high quality service consistently, customers will develop trust in everything they do and subsequently remain loyal.
- **Action:** Customers need instant and prompt action when a problem arises. In some cases, unforeseen circumstances or system delays at the DCT may prevent the provision of a speedy response or quick service. The DCT can delight their customers by offering to extend import storage at the terminal if there was a traffic congestion coming to the terminal due to wind standbys or other factors.
- **Appreciation:** Customers want to feel important and that their business is appreciated or valued by the service provider. The DCT can put in place a system for recognising and appreciating their customer by sending letters of appreciation or special discounts for reaching a certain milestone with the terminal (Harris, 2013:5).

2.3.2. Customer attributes

Transporters are not a homogenous category of people. While they all fall in the same category as customers, they differ in terms of their specific expectations and needs. Customers therefore differ from one other. Identifying customer attributes may allow the terminal to better understand who its customers are. This process includes identifying who frequently visits the terminal and whether they are importers or exporters or whether they transact in both activities. Harris (2013:8) stated that customer attributes are traits that allow customers to be classified based on demographic, psychographic, or firmographic information. Service providers mostly attempt to classify and group their customers so that they are able to serve them better and efficiently.

Lu, Gong and Wang (2011:97) emphasised that there is a realisation that markets should be segmented based on customer service requirements. They further stated that if container terminals are able to identify the exact service needs of their target customers, it would be possible to segment the user groups on basis of their differing service requirements. To do this, the terminal should understand the different service requirements of its customers. From the customer base, there are customers that deal mostly with imports and others with exports. Having this first-hand knowledge will assist in opening and closing of stacks and the window period given respectively. For this knowledge to be put to effective use, the organisation needs to understand service and service quality.

2.4. MEANING OF SERVICE

Service signifies all the actions that create a relationship between organisations and their customers. Furthermore, services are described as deeds, processes and performance. Service signifies business undertakings of which the final result is an intangible product and is simultaneously produced and consumed (Wilson, Zeithaml, Bitner & Gremler, 2012:5). Another school of thought by Berndt and Tait (2014:47) noted that service is any intangible benefit that is offered by the service provider to a customer which does not result in ownership. This is relevant in this case study because the terminal renders a service to the transporters when they collect or deliver containers at the terminal.

Berndt and Tait (2014:48) further stated that the key to improved customer relationships is that of high-quality customer service and a better relationship with customers, which is capable of eventually leading to greater customer retention, customer loyalty and notably, profitability. According to Yeo (2008:267), cut-throat competition in the service sector has forced organisations to move out of their shell and start delivering outstanding service to their customers. He further stated that service quality is not easily understood: it relates to physical, institutional and psychological aspects of the service sector.

2.5. CHARACTERISTICS OF SERVICES

According to Woo and Ennew (2005:1180), in order to define service clearly, service providers should focus on finding the distinguishing features between services and consumer goods. These differences are referred to as characteristics of services. Kurtz and Clow (2002:10) stated that the four characteristics of services are intangibility, perishability, inseparability and variability. Kotler and Keller (2012:381) were of the view that no service will be exactly the same because services are produced by humans.

Even though the DCT strives for perfection at all times, it is hardly possible to achieve this fit because the work involves using computer systems which are handled by humans and therefore human error is bound to occur. The DCT offers a service but it has the responsibility to ensure that the customer goods being received for both exports and imports are handled with care. Zeithaml et al. (2006:22) stated that services are intangible; they are performances or actions rather than objects that can be felt or seen as with tangible goods. Bruhn and Georgi (2006:13) reported that services possess characteristics not found in goods. Figure 2.1 below lists the various characteristics of services.

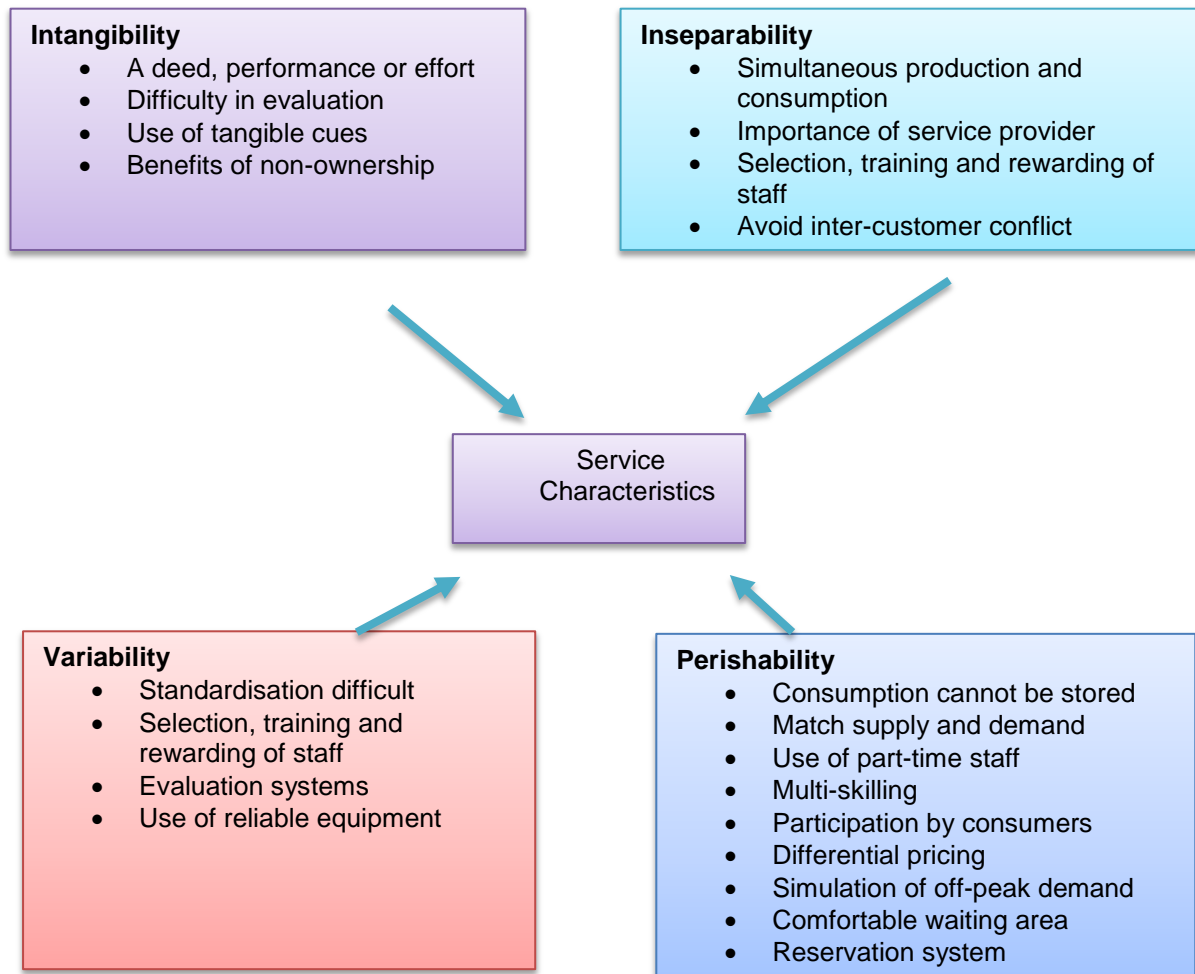


Figure 2.1: Characteristics of services

Source: Jobber and Ellis-Chadwick, 2013:363.

2.5.1. Intangibility

As shown in Figure 2.1, these services include intangibility. Dhurup et al. (2006:40) noted that unlike traditional business products, services are intangible and highly subjective and consumers look at evidence of service quality to reduce uncertainty. Armstrong and Kotler (2011:249) suggested that in order to reduce uncertainty, consumers seek certain traits of quality from the place, people, equipment and communications at a service provider. Furthermore, Chowdhary and Prakash (2007:496) explained that due to an intangible nature of the service, customer presence is very important to access or receive the services being offered. This implies that it is important to have equipment in good working condition, the people knowledgeable of services provided by the Durban Container Terminal and able to

handle any queries because customers search for tangible cues to evaluate the service performance or quality.

Ganesan-Lim et al. (2008:554) explained that customers have difficulties to ascertain the technical quality of the service and tend to focus on easily evaluated tangible and physical aspects of the environment as substitute indicators of quality. Armstrong and Kotler (2011:249) explained that because services cannot be seen, tasted, felt or heard, customers look for cues of service quality. From this it is clear that the terminal has to ensure that the service is tangible in some way or another by paying attention to equipment condition and how staff members interact with drivers during the waiting period before and after they are serviced.

2.5.2. Perishability

The degree of perishability in the quality of service is affected by the degree of intangibility (Bruhn & Georgi, 2006:14). As highlighted in Figure 2.1, perishability of a service means the service cannot be stored. Therefore, the provided service has to be right the first time. According to Armstrong and Kotler (2011:250), if demand is high, perishability of a service is not a problem. They further stated that should demand fluctuate, service organisations often face problems. To overcome the problem of perishability, the organisation needs to match demand and supply. This can be done by reducing terminal fees and other transaction costs borne by the customer. Management of the terminal can consider adopting this strategy in order to induce demand and drive more traffic towards the facility.

2.5.3. Inseparability

According to Armstrong and Kotler (2011:250), services cannot be separated from their providers, whether the providers are people or machines such as operators of straddles that load or offload trucks. The moment an employee provides the service, he becomes part of the service. The mere fact that a customer is available when the service is being produced means both the service provider and the customers have a bearing on the final outcome. Perez, Abad, Carrillo and Fernandez (2007:136) affirmed that the service is produced and consumed at the same time in most of the service industries. This kind of personal contact is known as interactive consumption and interactive process in the definition of service.

As shown in Figure 2.1, and according to Perez et al. (2007:136), inseparability of the service highlights the role of people in the service transaction and their influence on quality levels. Furthermore, these authors concluded that it is difficult for the service providers to hide quality shortfalls of the service. Thus, the behaviour of workers at the terminal is very crucial to customers' evaluation of the service such that their conduct will determine whether the customers will visit or use the facility in future or not. Drivers at the terminal expect the service to be delivered as promised and therefore any delays by members of staff or occasioned by the system may lead to service failure and loss of business.

2.5.4. Variability

Bruhn and Georgi (2006:14) explained variability as unwanted or random levels of service quality that customers receive when they make use of a service because it is produced by humans and therefore it is always a unique experience. Dhurup et al. (2006:40) emphasised that the service quality performance that is inconsistent and unpredictable leads to inconsistency and non-standardisation of terminals' outputs. Ganesan-Lim et al. (2008:554) affirmed that services that demand high contact require a great deal of investment in building customer relationships and offering higher levels of familiarity, confidence, trust and rapport, which imply that interaction quality will be higher. To overcome variability, the terminal should invest in the training of members of staff. Furthermore, management of the terminal can develop quality control measures and establish specifications as a guidance regarding the minimum tolerable deviations (Marshall & Johnston, 2010:358).

2.6. CUSTOMER EXPECTATIONS

According to Van Haaften (2010), customer expectation corresponds to both prior consumption knowledge, which comprises some non-experiential information and a forecast of the terminal's ability to deliver superiority in the future. He further stated that in addition, customer expectations are critical to service marketers and will deeply influence customer behaviour.

Zeithaml, Bitner and Gremler (2013:81) stated that customer expectations are viewpoints about service superiority, serving as principles against which performance of terminals is judged by their customers. But Johnson (1999:17) stated that it is

necessary for terminals to meet the expectations of its customers so that customers will be satisfied. The author further stated that standard services are no longer guaranteed to meet customer needs, mainly because customers have become used to being able to purchase services customised to their individual specification. It thus becomes important to go that extra mile to satisfy needs of customers.

A study conducted by Coy (2004:54) concluded that it is important for terminal managers to be aware of the factors that influence both customers' desires and expectations, and the potential opportunities for interventions that might lead to more successful supervision of these relationships.

2.6.1. Types of customer expectations

According to Berndt and Tait (2014:53), there are three types of customer expectations, namely predicted, desired and adequate service.

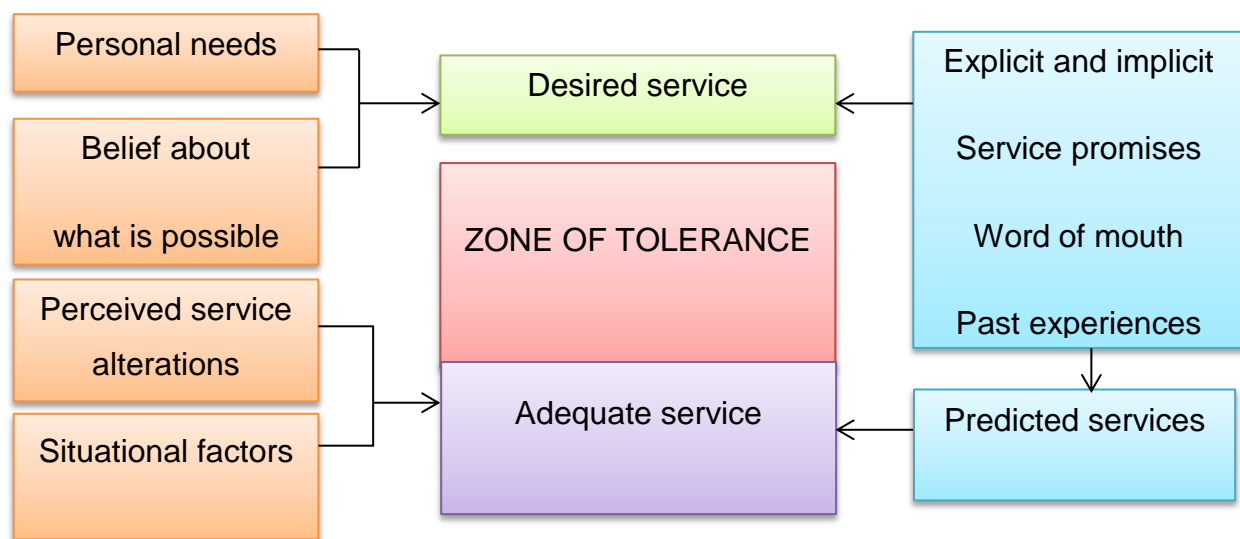


Figure 2.2: Factors influencing customer expectations

Source: Wirtz, Chew & Lovelock, 2012:47.

2.6.1.1. Predicted service

As highlighted in Figure 2.2, predicted expectations mean that customers anticipate or predict that a certain level of service will be provided. Predicted expectations are affected by customer experience and promises the service provider makes to its customer (Du Plessis, Strydom & Jooste, 2011:46). Wirtz et al. (2012:49) noted that

predicted expectations have a significant influence on customer purchase decision. The port being a monopoly business sees an influx of all transporters in the Durban area coming to the terminal. These same customers come to the terminal regularly and they become recognisable when dealing with the personnel and expect a certain performance level. Furthermore, customer satisfaction evaluations are developed by comparing predicted service to service received.

2.6.1.2. Desired service

Berndt and Tait (2014:53) noted that desired expectation is a perfect expectation that replicates what customers actually want, compared to predicted service which is what is likely to happen. Desired service reflects a higher expectation than predicted service. Transporters expect to be granted a bulk run if they have 30 or more containers to transport for one vessel.

2.6.1.3. Adequate service

As presented in Figure 2.2, adequate service is based on experiences that develop over time; it's the level of service the customer will accept. The 14:00 to 22:00 shift is the busiest at the terminal and as a result there is congestion and many delays to the terminal. Transporters have understood not to request a bulk run at these times (Berndt and Tait, 2014:53).

2.6.2. Levels of expectations

Levels of customer expectation can vary widely depending on the situation the customer holds. Harris (2013:17) put forward that customer service providers must recognise that customers have different levels of expectations. He further stated that expectations can be divided into two distinct categories: primary expectations and secondary expectations. Heller (2007:17) pointed out that it is recognised by customer service providers that customers have different attitudes of expectations and further attested that customers' expectations continually change and every customer has their own exclusive set of expectations. This set of expectations provides a distinctive opportunity for terminal organisation to consistently endeavour to be what the customer desires.

Similarly, Bruhn and Georgi (2006:54) classified customer expectations into predictive and normative expectations. Predictive expectations have a preventative nature, where customers have a foreseen level of output in advance which is taken for granted or considered likely to be delivered by the service provider. Normative expectations correspond to a demand for the service provider and describe the level of productivity needed by the customer from the organisation.

2.6.3. Techniques for exceeding customers' expectations

It is important to remember that customer expectations are always changing according to latest trends in the market. Heller (2007:20) believes that if the terminal fails to stay current with the competition, they may fail to live up to existing customer expectations. According to Zeithaml et al. (2013:88), desired service expectations are driven by more lasting factors, which tend to be high in demand on primary service and remain high. Metters, King-Metters, Pullman and Walton (2006:88) recognised lasting service intensifiers as individual, stable factors that lead the customer to a heightened sensitivity to service.

According to Zeithaml et al. (2013:90), there are factors that may be used by the terminal to exceed customers' expectations, that is to establish a working partnership with customers. If there are problems, it is advisable to let the customer be part of the solution that may prevent the problem from recurring. It is also advisable to promise only what can be delivered, and simply not to over commit as this leads to the customer not trusting the organisation. It is necessary to set realistic resolution time frames and always resolve issues in the given time frame. Should deviations occur, the customer should be given reasons. Lastly, commitment and dates should be documented by putting them in writing as this will force the terminal to try all possible avenues to keep to the promise as the customer will have something in writing should they wish to challenge unfulfilled promises. Delivering quality service means to be compliant in meeting customer expectations on a consistent basis.

2.7. CUSTOMER PERCEPTION

Customer perception is the progression by which customers choose, systemise and appreciate the stimulation of the five senses of sight, sound, smell, touch and taste (Cant, Brink & Brijball, 2002:99). However, according to Theron, Bothma and Du Toit

(2004:9), customer perception is based on customer experience, knowledge, expectations, influences and interpretation. Heller (2007:16) illustrated that perceptions often develop over time, are an indication of prior treatment, are related to customer values, priorities, biases and sensitivity to others.

2.7.1. Three factors that shape perceptions

According to Theron et al. (2004:10), there are three factors that shape perceptions:

2.7.1.1. Context

This concerns the setting in which the information is received. In a customer service context, this would imply the situation at present. If the transporters are constantly facing challenges when coming to the terminal, this may create a negative perception (Theron et al., 2004:10).

2.7.1.2. Customer characteristics

This involves personal knowledge and experience. This means perception can change from day to day and from experience to experience. Each experience with the organisation will modify the customer's perception and will ultimately create a positive attitude towards the organisation or not (Theron et al., 2004:10). Thus, previous experience of the DCT customers assists in shaping their perception of the service.

2.7.1.3. Customer interpretation

This implies that the customer will attach meaning to the stimulus, forming a 'ruling' as to whether it is an object they like and of what value it would be to them as the perceiver (Theron et al., 2004:10).

2.7.2. Three stages of perception process

It is based on these stages that the truck driver will form perceptions about the level of customer satisfaction received at the terminal. According to Sheth and Mittal (2004:139), there are three stages of the perception process:

2.7.2.1. Sensation

Attending to an object or an event in the environment with one or more of the five senses: seeing, hearing, smelling, touching and tasting. Truck drivers will form perceptions by responding to advertisements or any communication with the terminal (Sheth & Mittal, 2004:139).

2.7.2.2. Organisation

Organisation refers to categorising by matching the sensed stimulus with a similar object in categories in one's memory. This could mean a reaction by the transporter when they see the terminal logo (Sheth & Mittal, 2004:139).

2.7.2.3. Customer interpretation

Customer interpretation refers to attaching meaning to the stimulus, forming a ruling as to whether it is an object the receiver likes and of what value it would be to them. For example, interpreting the marketed message the way it was intended by the terminal (Sheth & Mittal, 2004:139). Kotler and Keller (2012:147) showed that the satisfaction of customers is predisposed to specific features of either service or product, as well as perceptions of quality. The way in which customers perceive, organise and interpret stimuli is a reflection of their past experiences and classification used to recognise the different situations each customer frames every day. It is important for the terminal management to eliminate any stimuli that might provoke negative perceptions in the customer.

2.8. SERVICE QUALITY

Service quality is a subjective concept and has multiple perspectives. Researchers in the modern world have used different attributes to explain and measure quality. Others scholars have observed that it is a daunting task to measure service quality. This is so because the customer has their own specification of what represents quality. However, the consensus is that quality is evaluated by measuring the gap between customer perception and expectations (Parasuraman, Zeithaml & Berry, 1985:42).

Similarly, the American Society of Quality (ASQ) has noted that that quality signifies different things to different individuals. They came up with a definition of quality

based on certain attributes that satisfy the customer. They further noted that quality can be described based on three aspects. Quality of design: This implies quality that meets the description of the customer. Quality of conformance: This implies the quality sought is based on the customer's perspective. Quality of performance: This entails that service performance must meet the customer's expectation (Summers, 2010:4).

2.8.1. Service quality dimension

Parasuraman et al. (1988:27) stated that there are five dimensions of quality, namely: Tangibles, Responsiveness, Reliability, Assurance and Empathy. These five dimensions are found relevant for various organisational services. Customers view service quality as a multi-dimensional concept since there are many factors that are relevant to the context (Zeithaml et al., 2006:117).

2.8.1.1. Tangibles: Representing the service physically

Zeithaml, Bitner and Gremler (2013:91) referred to tangibles as the impression regarding physical facilities, equipment, personnel and communication materials. Tangibles provide physical representation or images of the services that customers will use to evaluate quality. Tangibles are visual elements that will enhance the image of organisation from the customers' perceptions. Tangibles in ports may include but are not limited to equipment, e.g. straddles, mafis, reach stackers, STS cranes, computer systems and actual port buildings or facilities.

2.8.1.2. Responsiveness: Willingness to help

Zeithaml et al. (2013:90) stated that responsiveness is the willingness of employees to assist customers promptly with their service needs. This dimension contends that being attentive and prompt is critical in dealing with customer requests, questions and complaints. Bruhn and Georgi (2006:52) believe that responsiveness refers to the service provider's competence to meet the needs of the customer. Responsiveness in the context of container terminals would relate to how employees respond to customer complaints, tactfulness when addressing customers and telephone etiquette.

2.8.1.3. Assurance: Instilling trust and confidence

Zeithaml et al. (2013:90) postulated that assurance is the ability of the organisation and the knowledge of employees to inspire trust and confidence in customers. Bruhn and Georgi (2006:52) referred to assurance as the ability to deliver the promised output, specifically in terms of politeness and trustworthiness. Assurance in the context of the container terminal may mean the driver will get the processed container without delays and this will result in the driver observing consistency and thus experiencing assurance.

2.8.1.4. Reliability: Delivering on promises

Zeithaml et al. (2013:89) contended that reliability is the ability of the organisation to provide a service that is accurate and dependable. It is further described as the most important determinant of perceptions of service quality. Yeo (2008:271) indicated that discrepancies between company promises and the actual service delivered can be as a result of inaccurate communication from advertisements and roadshows. This implies that the terminal should ensure that marketing communication from the institution is based on the capacity and availability of resources to fulfil the promises.

2.8.1.5. Empathy: Treating customers as individuals

Zeithaml et al. (2013:90-91) stated that empathy refers to the organisation and employees' ability to be caring and provide personalised attention to the customers. The essence of empathy conveys the message that customers are unique and special. Empathy in the ports environment may mean that customers are made to feel important. This may be demonstrated by dealing with one driver at a time and making sure he is helped with his query before attending to the next one. Yeo (2008:275) asserted that service managers should adopt customer orientation by showing a human face to interaction with customers.

2.9. MEASURING SERVICE QUALITY USING THE SERVQUAL

This study adopted SERVQUAL as an instrument for measuring service quality. SERVQUAL is an existing model that was developed based on five dimensions, namely reliability, responsiveness, assurance, empathy and tangibles (Parasuraman et al., 1988:27). These five dimensions were discussed in the previous section. Zeithaml et al. (2006:116) argued that customers do not perceive quality in a one

dimensional way, but rather on multiple factors relevant to the context and hence the use of the five dimensions. SERVQUAL has been used in various industries and a study which adopted the measurement instrument found that the number of dimensions of service is not unique. Parasuraman, Zeithaml and Berry (1993:145) suggested that SERVQUAL provides a basic skeleton through its expectations/perceptions format and when necessary, the skeleton can be adapted or supplemented to fit the characteristics or specific research needs of a particular organisation. Extensive research has been undertaken on the SERVQUAL instrument by different authors with different findings.

Published studies include several service fields: retailing (Alzola & Robaina, 2005:45-57; Gaur & Agrawal, 2006:317-330), the health industry (Kilbourne, Duffy, Duffy & Giarchi, 2004:226-223; Ramsaran-Fowdar, 2008:104-124), airline industry (Chau & Kao, 2009:106-134), hospitality industry (Al Khattab & Aldehayyat, 2011:226-223, Guzzo, 2010:85-97), banking (Arasli, Mehtap-Smadi & Katircioglu, 2005:41-56; Kumar, Kee & Manshor, 2009:211-228), information service business (Van der Wal, Pampallis & Bond, 2002:323-335), amongst others. It is thus evident that SERVQUAL has been extensively used.

Parasuraman et al. (1985:44) stated that the SERVQUAL model allows for measuring the gap between customers' expectations and perceptions of service quality in service organisations. The model identifies five gaps that cause unsuccessful delivery (Kotler & Keller, 2012:396). This study sought to evaluate Gap 5 which is the gap emanating from the difference between expected and perceived service provided by an organisation. The Gaps Model of service quality was developed by Parasuraman et al. (1988:13). Parasuraman et al. (1988) formulated a service-quality model that highlights the main requirements for delivering high service quality (Kotler & Keller, 2012:395). Thus, SERVQUAL is a technique that can be used for performing a gap analysis of an organisation's service quality performance against customer service quality needs.

In their study, Zeithaml et al. (2013:82) suggested that regardless of the service or service industry, consumers use the same criteria in evaluating service quality. In this study, the gaps model was used at the DCT to evaluate customers' perception and expectation. The difference between expectation and perception creates a gap that

signifies that customers are either satisfied or not satisfied with the operations at the DCT. Ali, Ali and Radam (2010:88) noted that the gap model assumes that service quality is adequate when perception is similar or higher than expectations.

Bodet (2006:150) mentioned that the SERVQUAL scale has been replicated and examined in various service industry contexts. SERVQUAL takes into account customers' perceptions of the relative importance of service attributes which allow an organisation to prioritise and to use its resources to improve critical service attributes. The model, as highlighted in Figure 2.3, shows the five service quality gaps (Gap 1 to Gap 5) and how service quality is evaluated between the service provider and the customer.

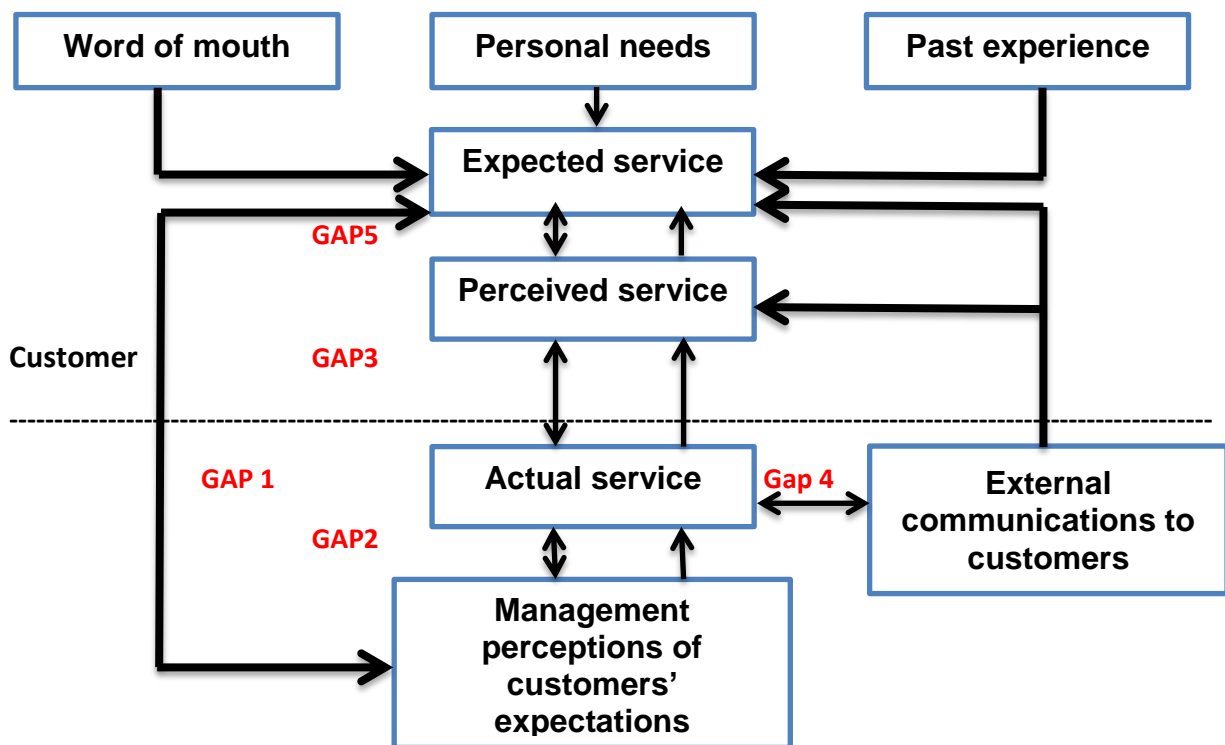


Figure 2.3: The SERVQUAL Gap Analysis Model

Source: Adapted from Kotler and Keller, 2012:395.

2.9.1. Gap 1: Consumer expectation and management perception

Gap 1 is the difference between customer expectations of service and the organisation understands of these expectations (Kotler & Keller, 2012:395). The organisation management may assume that they understand the needs of the

customer when in actual fact the customer is expecting something different. In order to close this gap, the management of the terminal should conduct market research so that the expectations of customers are properly understood. There needs to be constant communication between customers and an organisation's management for the business to grow (Jobber & Ellis-Chadwick, 2013:371).

2.9.2. Gap 2: Management perception and service-quality specification

Gap 2 occurs when management might correctly perceive customers' wants but not set a performance standard to achieve what customers want (Kotler & Keller, 2012:395). The possible cause of this gap is when there is no alignment between the organisation's strategic vision or goal and customer needs. Thus, management believe that customer expectations are farfetched and unattainable. To close this gap, management of the terminal should create effective service processes, institutionalise quality standards and orient service employees to following the service standards and priorities. There is a need to introduce new technology to facilitate standardisation of work and consistency in processes used (Wirtz et al., 2012:436).

2.9.3. Gap 3: Service-quality specifications and service delivery

However well management may understand the customers' desires and however strongly the service design relates to that understanding, should the terminal employees be unable or reluctant to execute the service responsibilities at the level required, the gap will appear between service design and service performance. According to Kotler and Keller (2012:395), Gap 3 is where the workers are poorly trained, or reluctant to meet outstanding customer service such as not paying attention to customers' needs and helping them where possible. Even when guidelines exist for performing service well, high quality service performance is not a certainty – possibly due to human error or mechanical breakdowns – and appropriate resources must be in place to support standards. To close this gap management must invest in their employees by providing appropriate training and introducing a support system that will assist employees to quickly solve customer problems (Jobber & Ellis-Chadwick, 2013:371).

2.9.4. Gap 4: Service delivery and external communication

According to Kotler and Keller (2012:395), this gap implies that certain promises are made by the terminal to customers based on over-promising in advertising and other marketing communication. Customer expectations are formed by communication from the service providers' representative or employees and media advertisements. There may be dissatisfaction with the service due to the fuzzy expectations developed through the service providers' communication efforts. In order to close this gap, the management of the terminal should only initiate a programme or promise that they will be able to deliver consistently rather than making promises that they will not be able to sustain in the long run. Simply put, overpromising may help to secure a customer but keeping them is not a certainty and hence promises made should be realistic and achievable (Ferrell & Hartline, 2011:374).

2.9.5. Gap 5: Perceived service and expected service

Palmer (2008:330) and Kotler and Keller (2012:395) posited that this gap occurs when there is a discrepancy between the expected service and perceived service which leads to the evaluation being that of poor service quality. Parasuraman et al. (1988:13) stated that the key to delivering quality service is to meet or exceed customer expectations. This gap can be closed by putting procedures in place to measure performance standards and subsequently meet customer expectations. It is vital that service performance procedures are introduced against customer expectations with the aim to close the perceived service and expected service gaps. Gap 5, shown in Figure 2.4, needs to be closed for any organisation to be successful.

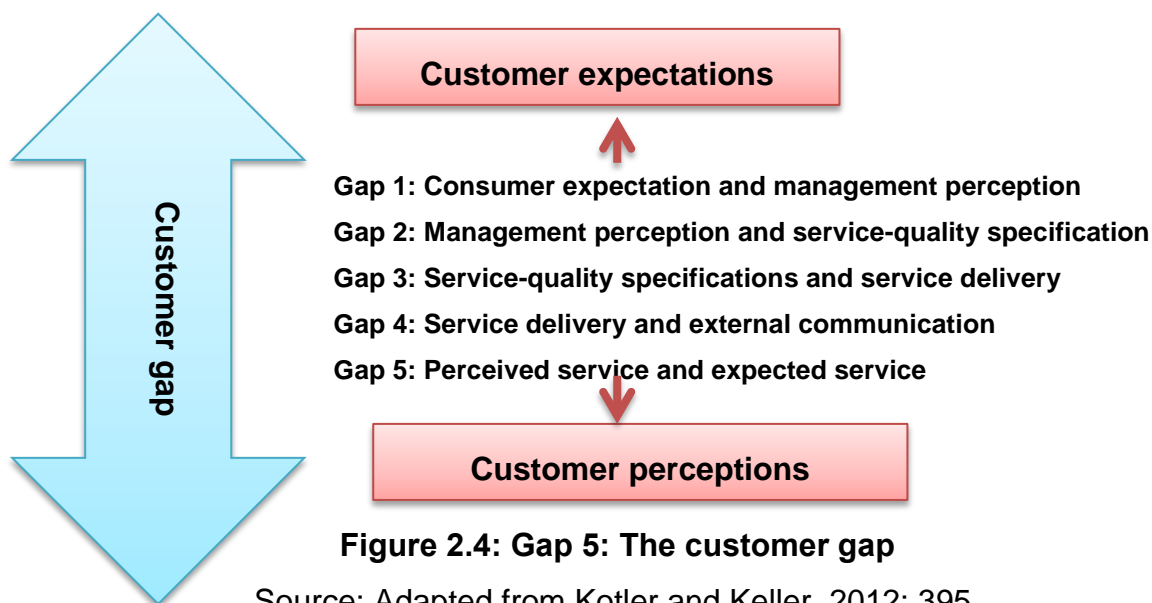


Figure 2.4: Gap 5: The customer gap

Source: Adapted from Kotler and Keller, 2012: 395.

2.10. PRACTICAL EVIDENCE OF THE SERVQUAL INSTRUMENT

Gaur and Agrawal (2006:318) observed that SERVQUAL has been widely used to evaluate quality of service in the retail sector. Similarly, Carman (1990) was the first to use the SERVQUAL instrument in the motor vehicle industry. The findings suggested that the five dimensions of SERVQUAL cannot be applied universally and that new dimensions should be adapted to predominant situations. Cronin and Taylor (1992:55-68) analysed the SERVQUAL and provided a theoretical justification for the exclusion of expectation and opted for a performance only measurement scale. The term 'performance-only' means that service quality evaluation is based on customer perception of the service providers' performance and is different from a gap between the consumers' perceptions and their expectations. The authors named their scale SERVPERF (Al Khattab & Aldehayyat, 2011:227).

A few studies have shown that the performance-only SERVPERF scale overtakes the disconfirmation-based SERVQUAL scale (Andronikidis & Bellou, 2010:570-587; Vibha, Ravichandran & Jain, 2011:20). The performance scale, the SERVPERF, was developed to focus on customers' perception only. Cronin and Taylor (1992:56) believe that there is little or no theory that supports the application of measuring quality using expectations. They recommended perception as a yardstick for measuring service quality

Parasuraman et al. (1993:145) believe that expectations are crucial for providing rich and more accurate diagnostic information. The effect of customers' prior expectations

on their perception and processing of information has been overemphasised (Sheth, Sisodia & Sharma, 2000:55-66), but these authors have considered expectations as an important influencing factor among others, not as a component of perceived quality. For the purpose of this study, the SERVQUAL model was used as it was the most appropriate measuring instrument in the context of this research. The SERVQUAL model provided the study with a guide of expectations and perceptions questions which were adapted for the relevance of this study in a container terminal. The SERVQUAL model is a tool that is used to expose underperforming sections or departments, thus providing the service provider with information to rectify the problems (Parasuraman, Zeithaml & Berry, 1991:445). The use of both expectation and perception was vital in this study because it is important for the DCT to ascertain customer expectations if they are to meet their needs. Customer expectations are not static and the onus is on the management of the terminal to regularly check if customer expectations and needs have changed or not. This will facilitate the application of corrective measures which are aimed at closing gaps that have been discovered and to ultimately satisfy the customers.

2.11. CRITICISM OF THE SERVQUAL INSTRUMENT

Although the SERVQUAL instrument has been widely used in measuring service, it is not short of criticism from other authors. Some of the criticism about SERVQUAL focuses on the use of expectations as a comparison standard in the measurement of service quality (Al Khattab & Aldehayyat, 2011:228). Cronin and Taylor (1992:53) noted that the measurement of the expectations and perceptions in the SERVQUAL instrument is based on the gaps model approach to service quality, which does not have a practical basis and its findings cannot be considered first hand. Martinez and Martinez (2010:36) noted that service quality is multidimensional and the dimensions cannot function independently of each other. Similarly, the dimensions of service quality are not universal and comprehensive and thus cannot be used or implanted wholesale to evaluate service quality in different sectors of the economy (Gupta & Dev, 2012:621).

More operational and theoretical criticisms relate to the interpretation and implementation of the instrument. Svensson (2004:280) argued that SERVQUAL cannot be applied universally across different sectors. The focus of SERVQUAL is

also criticised, as it focuses on the service delivery process rather than the service-encounter outcomes (Kang, 2006:38).

According to O'Neill and Palmer (2003:188), SERVQUAL's five dimensions (assurance, empathy, tangibility, reliability and responsiveness) are not universal and the model fails to draw on established economic, statistical and psychological theory. Another criticism against SERVQUAL is the inability to connect the perceptions in the model to specific attitudes, and also not connecting to fields of study such as economics and psychology.

The fact that SERVQUAL has been criticised by several scholars does not imply that the measuring instrument is completely ineffectual. SERVQUAL and its alternative measures, namely SERVPERF, weighed SERVQUAL, and weighted SERVPERF, are the most widely used instruments in service literature for measuring service quality. However, previous studies have not come up with conclusive findings regarding superiority of any of these measures (Andronikidis & Bellou, 2010:570). Ladhari (2009:172-198) reviewed several studies that used the SERVQUAL scale in a 20-year period (1988–2008) and found that only few researchers concerned themselves with the validation of the measuring tool.

The operationalisation of service quality is still a subject of debate. However, the consensus is that service quality is a multi-dimensional or multi-attribute construct (Zhao, Bai & Hui, 2002:243). The SERVQUAL instrument has been criticised and other researchers believe the use of expectation and perception in the same study is redundant. They advocated the use of perception only to evaluate service quality; hence SERVQUAL was modified to include performance or perception only. Thus a SERVPERF instrument was created, (Cronin & Taylor, 1992). Despite the criticism, Ladhari (2009:189) posited that the SERVQUAL is regarded as the most complete and robust tool or attempt to conceptualise and evaluate quality of service. This study opted to use SERVQUAL in order to establish the gaps in service quality which the other instruments fail to institute. Bruhn and Georgi (2006:54) affirmed that in spite of criticism against SERVQUAL, the measuring instrument remains the most used in all sectors of the economy including the container sector.

2.12. CUSTOMER SERVICE

Haycox (2011:17) stated that customer service provides a platform for continued growth and helps with building the business reputation. Heller (2007:2) defined customer service as anything done to enhance the customer experience, but Berndt and Tait (2014:47) explained that customer service is any service rendered by the service provider to the customer in order to secure sales and maintain their loyalty. Another school of thought suggested that customer service is everything that a service provider does to create a very good customer experience every time the customer wants to access products and services (Machado & Diggins, 2012:2).

Worldwide, containerisation is growing at a fast rate and thus the need for keeping customers happy is also growing. The growth in the container business means more choices are opening to customers and therefore customer services need to be taken seriously. Therefore, customer services should be prioritised and practised consistently because it gives a business competitive advantage over others. Furthermore, organisations that are service oriented are more highly rated than those that are fairly successful and obviously those that are totally ineffective (Theron et al., 2004:2).

A comprehensive definition of customer service provided by Swartzlander (2004:1) affirms that customer service includes the behaviour and attitudes of a company and its personnel towards customers during all interactions and communication with them. The operations at the DCT are customer service oriented and the conduct of the personnel has a bearing on whether the customers of the terminal will be happy with the type of service being provided at the terminal. It must be noted that the provision of remarkable customer service is a collective responsibility of everyone in the organisation. For that reason it is imperative for all employees and not only customer interface or front desk employees to ensure that they provide a seamless service that will delight the customer.

Outstanding customer service provision by the terminal can subsequently lead to a service excellence culture. Service excellence refers to the provision of excellent service quality through a management system, exceeding customers' previous expectations to result in not only customer satisfaction but also customer delight and

therefore greater customer loyalty (Edvarsson & Enquist, 2011; Khan & Matlay, 2009).

Since services are perishable, this essentially means that it is not possible to go through a final quality check on what has been offered. It is important to find out exactly what customers want or expect, i.e. customer satisfaction. Ghobadian, Speller and Jones (1994:45) stated that since one cannot feel or touch or smell service, customers usually look for signs of quality such as reputation, accessibility, communication, and physical tangibles. This places greater responsibility on the service organisation to deliver what they promise.

2.12.1. Customer satisfaction

Fitzsimmons and Fitzsimmons (2006:128) explained customer satisfaction as measuring perceptions of service received against desired expectations of service. Metters et al. (2006:110) pointed out that customer satisfaction is the customer's fulfilment response. At the port, it will be the response of how fulfilled the truck driver was based on the service received from in-gate to out-gate. According to Bodet (2006:149), customer satisfaction is recognised as a key construct for both managers and researchers interested in service relationships.

Yadav and Rai (2015:18) noted that customer satisfaction simply means the degree to which the customer is satisfied with the service provider's offering. Customer satisfaction is critical because a happy customer guarantees repeat business and loyalty. Customer satisfaction and frequent patronage of the business will lead to increased profits. Thus, customer satisfaction is created by correctly matching the needs of customers with the information, goods and services that organisations offer. Similarly, Koklic, Kukar-Kinney and Vegelj (2017:7) observed that customer satisfaction drives consumer intentions to patronise the service from the terminal in future as well as recommendation of the facility and its services to other customers.

Kotler and Keller (2012:150) affirmed that by focusing on customer satisfaction, organisations will enhance the lifetime value of customers as they continue to frequent the port for years to come. Satisfaction is influenced by perceptions of service quality, product quality, and price as well as situational factors and personal factors (Zeithaml et al., 2006:107). Customer experience can either create a good or

bad image of the terminal. Metters et al. (2006:119) indicated that high quality customer service and high customer satisfaction require commitment of terminal management, supervisors and service employees to create and maintain a strong terminal presence.

2.12.2. Customer satisfaction and service quality as related concepts

Since the 1990s, both service quality and customer satisfaction have been recognised as critical strategic imperatives for reinventing the public sector. Before ascertaining how customers view the service rendered, there is a need to understand service quality and customer satisfaction.

Olorunniwo, Hsu and Uo (2006) defined customer satisfaction as the customers' positive response regarding the fulfilment of their needs. It is the evaluation as well as an emotional-based response with respect to the service. Oliver (1997) and Gupta and Zeithaml (2006) defined customer satisfaction as a disconfirmation of the expectations. Kim (2011:27) noted that customer satisfaction is a psychological state emanating from confirmed or disconfirmed expectation of the customer's prior feeling about the consumption experience. Disconfirmation is regarded as the fulfilment of expectations. Positive disconfirmation entails that the service performance exceeded the expectation whereas negative disconfirmation entails that the service performance was below customer expectations. The implication is that when service performance matches the expectation, the customer is satisfied and if it exceeds the expectation, the customer is delighted

Hartline and Ferrell (1996) defined service quality as a difference between customers' expectations and their perceptions of service. Furthermore, Gupta and Zeithaml (2006) stated that service quality is the customer's perception of the service and is a critical determinant of customer satisfaction. Abbasi, Khan and Rashid (2011) deduced that this view holds that customers compare what they receive with the preconception standard or expectation.

Arokiasamy and Abdullah (2013:3) cited Cronin and Taylor (1992) that since customer satisfaction has been considered to be based on the customer's experience of a particular service encounter, accordingly – service quality is a determinant of customer satisfaction, because service quality comes from the

outcomes of the service providers in organisations. From the preceding, it can be concluded that customers' needs and quality of service may result in customer satisfaction.

The realisation in the business world that the customer is not the source of the problem has made organisations shift focus to customer satisfaction, loyalty and retention. Arokiasamy and Abdullah (2013:2) stated that customers are the purpose of what we do rather than them depending on us. The need to satisfy the customer propels management within the organisation to find out exactly what it is that customers expect. This drives the organisation's leaders to engage customers and align the organisational quality standards and norms according to what customers expect.

Gouthier, Giese and Barl (2012:3) believe that service excellence should generate extraordinary satisfaction; however, Johnston (1999) challenged the idea that businesses should rely solely on the delivery of unexpected and surprising service experiences; he asserted that exceeding expectations and surprising customers may cause superfluous costs for businesses. Therefore, satisfying customers does not necessarily mean introducing new things; it means just doing what is expected.

According to Golder, Mitra and Moorman (2012:1), quality is perhaps the most important and complex component of business strategy. Furthermore, they stated that quality is a key force leading to delighted customers and profitability of the firm. Customers differentiate between processes and output quality as they judge processes during the service and output after the service. Bloise and Tankersley (2004:77) mentioned that in both profit and non-profit organisations, service quality has grown more important as service providers face more effective market competition, both locally and globally.

2.12.3. Customer devotion

Cohen, Gan, Yong and Choong (2006:7) noted that customer devotion is an applicable concept in situations where a customer has an option to choose a different terminal. According to Bhote (1996), a customer's satisfaction with a company's product or service is seen as customer devotion when the customer becomes a passionate word-of mouth advertiser. Therefore, establishing customer devotion is

about successfully managing each terminal. Transnet has many terminals and the performance of each terminal determines customer devotion and patronage. It is critical to state or rather assume, based on the characteristics of services, that despite Transnet operating many terminals and having same standards, the actual performance may vary per terminal because of the expertise of workers and other factors that hinge on human interaction. Thus, customers will have preferences over which terminal to patronise based on a set of performance attributes that differ across the board based on their subjective assessment.

According to Linton (1993:15), effective customer devotion programmes will also have a major impact on the long-term terminal projection and will influence management actions. Bansal and Gupta (as cited by Van Ravesteyn, 2005:452) ascertained that the only way of building sustainable competitive advantage is by fostering customer devotion.

Johnson (1999:25) attested that the cost of serving a loyal customer is five or six times less than that of serving a new customer. Walsh, Groth and Wiedmann (2005:421) agreed that looking after existing customers precedes the acquisition of new customers. In other words, it is more economical businesswise to serve a loyal customer than to serve a new customer. In addition, Gee, Coates and Nicholson (2008:355) identified that the subsequent reward of customer loyalty and the service cost of a faithful customer is less than that of new customers. They further agreed that the loyal customer will continue to act as a word-of-mouth marketing agent for the terminal.

2.12.4. Aspects that lead to customer devotion

Terminals are cost centres and as such they are assessed based on a number of issues such as profitability and safety. Despite terminals operating under one organisation, which is Transnet, the management of each terminal has the responsibility to make sure that it creates a pool of customers that are satisfied and loyal. There are certain traits that the terminal can adopt that may lead to customer devotion. This will need buy-in from staff members that deal directly with truck drivers to keep them satisfied and thus loyal. According to Van Ravesteyn (2005:75), the following three aspects can be used by the terminal as a guide to customer devotion:

- The terminal should establish what customers need by conducting a snap survey or research to determine needs and preferences of customers. This is critical to developing a customer base that can be satisfied and devoted.
- Customer devotion needs to be measured. The terminal needs to measure how customer loyalty affects Transnet's profit margin. It is pointless to institute a mechanism that enhances customer devotion which at the end of the day does not contribute to the bottom line.
- Top management and frontline employees must be committed to customer devotion and need to be involved in the interaction with the core customer base. The terminal must have a customer-oriented culture (Van Ravesteyn, 2005:75).

2.13. CUSTOMER RETENTION AND BUILDING LONG VENTURES

According to Cohen et al. (2006:5), customer retention has an impact on improving prosperity of the terminal by reducing costs incurred in acquiring new customers. Berry and Parasuraman (1991:152) believe that the key to having contented customers depends on having a contented workforce. A major driver of customer retention improvement is to see whether employees perceive the terminal and retention positively.

Harris (2013:8) recognised that satisfying internal customers will lead to creating an excellent foundation on which to embark on meeting external customers' desires. Ahmed and Rafiq (2003:1243) and Manville and Ober (2003:48) agreed that an increase in contentment levels of terminal employees transforms into higher perceived service superiority from external customers; this will help the terminal to retain the trust and commitment of their customers.

Linton (1993:76-78) postulated that a joint venture is an extreme shape of customer loyalty, in which customer and terminal work jointly to achieve mutual benefits, such as security of supply and continuity of contract asserts. Furthermore, it takes continuous management effort to build and maintain joint ventures. This requires the terminal to:

- understand and develop the changing relationship between the customer and the terminal through continuous interaction programmes;

- identify partnership opportunities by analysing customers' business activities;
- meet customers' changing requirements by working closely with the customer team.

It is vital for the terminal to be persistent in building customer loyalty and thus retaining that customer base. Linton (1993:206) attested that the above will ensure lifelong accomplishment and prosperity of the terminal. The joint venture signifies a good relationship between the customer and the service provider. This provides for co-creation of different initiatives that may have an impact on both the terminal and the customers. When a fit of this nature is achieved, the customer develops realistic expectations rather than far-fetched ones, service quality gaps are minimised, and the customer is satisfied and devoted. Thus, customer devotion is a good indicator for loyalty and can contribute positively towards the organisation profitability, specifically the terminal.

2.14. CONCLUSION

In Chapter 2, the literature on service, service quality dimensions, and customer satisfaction in the terminal was explained. Customer service and devotion were also highlighted. The literature review emphasised the fact that customer service is a key issue to sustain the terminal's performance and eventually lead to customer satisfaction. The chapter also explained the five service quality dimensions, as developed by Parasuraman et al. (1988:13).

The Gaps Model of service quality highlighted what triggers the service quality gaps in an organisation. In this regard, five service quality gaps were analysed to identify the causes that may lead to the occurrence of the gaps as presented by different scholars. However, the focus of this study was on gap five which is the difference between customers' expectations and perceptions of service quality. This gap was presented and analysed as the most important gap to close in order to improve service quality within a service organisation. In addition, the SERVQUAL was analysed to provide the basis for which this study was undertaken and several studies that have used the instrument in different sectors were cited. Despite the criticism of SERVQUAL, several scholars still regard the instrument as a valid, reliable and appropriate tool for evaluating service quality. Customer satisfaction was

discussed using the disconfirmation concept as the ultimate goal of the service provider if the customers are to derive value in the use of the services at the terminal.

The following chapter (Chapter 3) highlights the research methodology that was adopted for this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1. INTRODUCTION

Chapter 2 offered literature on services, service quality, customer satisfaction, customer perceptions and expectations and the five dimensions of service quality. The Gaps Model of service quality was also presented. Chapter 3 discusses the research methodology that directed the research and enabled the researcher to collect and analyse the data.

3.2. RESEARCH PHILOSOPHY AND PARADIGM

Research methodology is based on the foundation of ontological and epistemological assumptions. Ontology is concerned with the basic nature of reality or what exists. It encompasses two fundamental propositions, namely realist and nominalist. Realists believe the world exists independently of humans and their interpretations of it whereas the nominalist assumes that humans never experience reality out there. It contends that what we call reality is made of subjective interpretations. On the other hand, epistemology is based on the creation of knowledge and focuses on what humans know or what are the most plausible ways to reach the truth. Furthermore, it has been observed that knowledge can be produced both inductively and deductively. To produce knowledge deductively, research must test pre-existing ideas and conjectures about reality against empirical data, whereas to produce knowledge inductively, researchers must observe, interpret and reflect on what people are saying and doing in specific social contexts (Neuman, 2011:91-93).

Three approaches or paradigms in social science research are positivist, interpretive and critical social science. A paradigm is nothing more or less than a conceptual framework providing a model from which springs a particular coherent tradition of scientific research. Positivist is the oldest and most widely used research paradigm. Each paradigm is associated with different social theories and diverse research techniques. This study adopted the post-positivistic paradigm which is also known as 'post-empiricism', subtle-realism or 'neo-realism'. While positivists assume that the researched people are independent of each other, post-positivists accept that

theories, background and values of the researcher can influence what is observed. However, like positivists, post-positivists pursue objectivity by recognising the possible effect of biases (Somekh & Lewin, 2005:207; Neuman, 2011:94).

3.3. RESEARCH DESIGN

This research was based on the case study of the Durban Container Terminal. There are three types of research designs: exploratory, descriptive and causal research. Exploratory research is aimed at uncovering new ideas and insights of a phenomenon. It is sometimes used to define the managers' decision problem and generate possible explanations. Descriptive research is aimed at assessing the frequency at which something occurs or the relationship between variables. Causal research is aimed at determining the cause and effect relationships that normally take the form of experiments (Churchill, Brown & Suter, 2010:79).

In this study, both exploratory and descriptive research designs were used; hence a mixed research method was adopted. The use of both research methods was appropriate because, as posited by Mouton and Marais (1990:160-170), a single approach is limited in investigating phenomena in social science that are tightly enmeshed. Thus, by combining quantitative and qualitative research, there is a greater possibility of understanding human nature and reality. According to Prosavac and Carey (1989), mixing the two traditions may often be the best approach in social science because it presents a fuller and more comprehensive study.

This study involved the gathering of some quantitative data from the truck drivers and elaborate responses from management of the clientele through structured interviews. Respondents rated questions on a Likert scale from 1 (Strongly disagree) to 4 (Strongly agree). The researcher used the data obtained through quantitative and qualitative means to address the research questions and objections of the study appropriately.

3.4. QUANTITATIVE RESEARCH

Quantitative research is sometimes referred to as survey research. It involves the administration of a set of structured questions with predetermined responses to a large number of participants (Burns & Bush, 2014:146). According to Mansourian and Madden (2007), quantitative research deals with figures and numbers. Amaratunga,

Baldry, Sarshar and Newton (2002) asserted that quantitative methods can be used to allow statistical testing as well as the strengths in such relationships.

3.5. QUALITATIVE RESEARCH

Qualitative research involves collecting, analysing and interpreting data by observing what respondents do and say. Qualitative research provides rich insights into the behaviour of consumers (Burns & Bush, 2014:146). Hyde (2000) stated that a qualitative approach allows the researcher to gain knowledge of the issues in-depth, thereby enabling a greater understanding of the situation. The qualitative aspect of the study focused on managers of companies in the clientele of the container terminal. Management representatives were interviewed telephonically. Semi-structured, probing interview questions were asked leading the interviewees to address the issues that are expected to answer to the customers' perceptions of service delivery at the container terminal. Churchill et al. (2010:83) noted that in-depth interviews are important because they tap the knowledge and experience of individuals with information that is relevant to the problem at hand.

3.6. TARGET POPULATION

The target population of this study comprised truck drivers and managers working in the terminal. Walliman (2011:185) postulated that a population is the total number of elements that are subject of a research investigation. Clow and James (2014:226) noted that the first step of the sampling process is to define the target population. The process of defining the population sounds easy but is often difficult for marketing studies. It is important to include limitations or boundaries of exclusion as part of the definition of the population.

3.7. SAMPLING

Sampling does not happen by chance. It is a process that needs careful planning and execution in order to make sure that all the relevant parameters of the study are incorporated. Sampling is often used in research because it is impractical to survey the entire population, unless the population size is small (Clow & James, 2014:226).

3.7.1. Sample size

A sample size decision is normally a compromise between what is viewed as theoretically perfect and what is practically feasible (Burns & Bush, 2014:267). The sample size for the quantitative study was 120 respondents. However, a total of 111 truck drivers answered questionnaires which dealt with their experiences at the terminal. The response rate was 92.5% (N = 111). Ten managers from clients of the container terminal were telephonically interviewed for the study; the interview included both import and export-related questions. The truck drivers and managers were surveyed separately. Clow and James (2014:230) noted that the use of a correct sample size does not guarantee that the findings of the study accurately reflect the target population. However, it is important for the sample to be large enough so that it is able to reveal patterns in the data. If the sample is small, the patterns may not appear.

3.7.2. Sampling technique

The purposive or judgemental sampling technique was adopted for this study because of its suitability to the study. The purposive sampling technique was used because only respondents with certain traits considered helpful to the study were selected. By selecting respondents in this way, the researcher ensures that only those with the ability to articulate the subject under investigation form part of the study (Churchill et al., 2010:336). In this case, managers of the different clientele were chosen because they liaise with the transporters as well as the terminal management. Truck drivers are at the heart of the operation; they stand in queues, they communicate with terminal employees and are present when the service is provided. Thus, it is appropriate for them to answer questions on service they receive from the terminal.

3.8. INCLUSION CRITERIA

Participants that had experienced service delivery at the container terminal for at least six months for both import and export shipments were chosen to be able to form informed opinions on the computer systems when gating in and out of the terminal.

3.9. EXCLUSION CRITERIA

Drivers and managers that are not from companies based in Durban were excluded from the study for accessibility reasons.

3.10. RECRUITMENT PROCESS

Respondents of the study were recruited at the staging area where drivers wait in queues for their turn to process and drive inside the terminal. The top 10 companies who frequently visit the terminal were approached and the executive management of these companies were given the characteristics of the ideal respondents. Each company had discretionary power to nominate a representative to be interviewed.

3.11. DATA COLLECTION

One of the critical processes of data collection is the administration of questionnaires. Once all the required steps of questionnaire development are satisfied such as designing, pilot testing and amendment, deployment of the questionnaire for data collection can commence (Saunders, Lewis & Thornhill, 2009:395).

3.12. DATA COLLECTION FOR THE QUANTITATIVE STUDY

The study employed two methods of data collection, viz. quantitative and qualitative. Data for the quantitative study were collected through questionnaire administration. Questionnaires were distributed to 120 drivers who had expressed their willingness to participate in the study. The service quality instrument or questionnaire, the SERVQUAL, was used to assess the drivers' perceptions and expectations of service quality at the terminal. Parasuraman et al. (1985; 1988) developed the SERVQUAL as an instrument for measuring quality based on five dimensions, namely tangibles, responsiveness, assurance, reliability and empathy.

3.13. DATA COLLECTION FOR THE QUALITATIVE STUDY

Data for the qualitative study were collected through interviews. Telephonic interviews were conducted with managers nominated by the transportation companies after the weekly focus meetings hosted by terminal management. Churchill et al. (2010:83) noted that interviews are flexible because respondents are selected based on their ability to provide usable information.

3.14. DATA ANALYSIS

Data analysis is useful as it enables the researcher to extract data that is meaningful and properly describes inherent characteristics of the phenomena (Burns & Bush, 2014:317). Data obtained during this study was analysed using the latest SPSS computer system. Descriptive data was presented using a coding system and charts. Frequency tables were utilised to contribute to accuracy and efficiency of processing the data.

Qualitative data collected through interviews was transcribed and emerging themes were presented.

3.14.1. Descriptive statistics

Welman, Kruger and Mitchell (2005:231) explained that descriptive statistics are used to explain the underlining features of the data in the study. Descriptive statistics refer to the organising and describing of quantitative data. Armstrong and Kotler (2011:135) stated that the objective of descriptive research is to describe things, such as demographics and attitudes of consumers. According to Welman et al. (2005: 229), frequencies determine if the distribution is even across categories or if they cluster around one or two categories. Descriptive data analysis includes summarised tables, measures of central tendency, dispersion qualities, tables, charts and graphs to describe, organise, summarise and present raw data.

3.14.2. Inferential statistics

Welman et al. (2005:231) explained that inferential statistics are concerned with inferences that are made about population indices, on the basis of the corresponding indices obtained from samples drawn randomly from the population. Inferential statistics comprise the form used to test the chi-square and also calculate the expectation and perception means which were ultimately applied to the SERVQUAL calculation to calculate gap scores for each of the five service quality dimensions.

3.14.3. Cronbach's alpha

According to the Academic Technology Services at the University of California, Los Angeles (Academic Technology Services [ATS], 2002), the Cronbach's alpha is used to assess how well a set of items measure a single one-dimensional latent construct.

Tavakol and Dennick (2011:53-54) believe that Cronbach's alpha is the appropriate measurement for determining reliability of a study. The alpha coefficient above 0.70 is considered adequate and acceptable. In this study, Cronbach's alpha was used to determine reliability scores of tangibles, responsiveness, empathy, assurance, reliability. Clow and James (2014:269) noted that the advantage of using the Cronbach's alpha is that correlation with other variables will be low for items that are not a good measure of a model. An important property of the co-efficient alpha is that its value tends to increase with an increase in the number of scale items (Bryman & Bell 2011:158). A large alpha value indicates a high reliability while scores close to zero indicate that the reliability of the instrument is low (Malhotra 2010:724). In this study, a Cronbach alpha coefficient of 0.810 was registered. This signifies a higher degree of consistency in the measurement instrument.

3.15. PILOT TESTING AND PRE-TESTING

For research to be valid and reliable, it is often advised to undertake pilot testing. Pilot testing is the process whereby the research design for the prospective study is tested to gain information which could improve the major study. According to Welman et al. (2005:231), when a new measurement instrument is developed, it is useful to pilot test it before administering it to the actual sample. A pilot study entails administering the instrument to a limited number of subjects from the same population intended for the eventual project. The authors further stated that the purpose of a pilot study is to detect possible flaws in the measurement procedures, identify unclear formulated items, and is an opportunity for researchers to notice non-verbal behaviour.

The questionnaire for the quantitative study was also pre-tested to gather information to determine if the content and sequencing of questions were correct. The information obtained formed the foundation upon which the study was carried out (Wiersma & Jurs, 2005:491). The research design for this study was pre-tested by administering questionnaires to 10 drivers on one shift. The pre-test phase was rather important because it helped the researcher identify the respondents' concerns which were addressed before the actual study was carried out. The instrument proved acceptable and understandable by the drivers.

The first page contained a letter of information explaining the purpose and importance of the study and assured respondents of their anonymity (see Annexure 1). The second page was the consent page that the respondents had to sign. The consent page explained that they may withdraw from the study at any time should they feel uncomfortable. The drivers had some reservations answering the questionnaire at the container terminal; they felt more comfortable answering it at A-check, where they felt it was more private. That was noted for the actual study.

Data for the qualitative study were collected by interviewing six managers of different transporting companies that upload and offload containers at the terminal. The researcher was given an opportunity to explain the study at the meeting held at the container terminal between terminal customer representatives and the transporter managers. This was a crucial stage as the transporters had the opportunity to understand the researcher's objectives and it proved to them that the researcher had full support from the terminal management to carry out this research. The managers suggested doing telephonic interviews rather than sitting down at a given venue. This proved to make sense as transporters' managers do not have offices, they work from depots. This was noted for the actual study.

3.16. DELIMITATIONS

Delimitations are factors that affect the study over which the researcher generally does have some degree of control. Delimitations describe the scope of the study or establish parameters or limits for the study (Baron, 2008). Due to the large number of potential participants from the population (truck drivers) for the quantitative research, the current study focused only on the Durban-based transportation companies. Qualitative data were collected via telephonic interviews as the researcher and the managers could not agree on a common venue that suited both parties. The time factor was also an issue as managers are constantly busy and could only determine their availability based on their schedule. The willing participants signed the consent form and indicated the suitable day and time the researcher could call for the interview.

3.17. CONFIDENTIALITY AND ANONYMITY

Mouton (2001:57) stated that ensuring anonymity and confidentiality with participants will help to establish greater content validity. The researcher assured participants that their responses will be treated with confidentiality, that is, their names, positions and contact details will not be made public. Furthermore, pseudo names were assigned to the data when capturing and analysing it so that the results of the study cannot be attributed to a particular known respondent.

3.18. VALIDITY AND RELIABILITY

Welman et al. (2005:142) defined validity as the extent to which the research findings accurately represent what is really happening in the situation. The study was pilot tested to ensure the validity and reliability. This ensured that the items presented in the questionnaire were clear and understandable. Parasuraman et al. (1988:13) affirmed that the procedures used in developing SERVQUAL satisfy both qualitative and quantitative evaluative requirements.

According to Welman et al. (2005:142), reliability measures the ability of the data collection instrument and method used for the study to obtain accurate and consistent results. The SERVQUAL instrument was used in the study to identify whether any gaps exist between customers' perceptions and customers' expectations at the container terminal. Published studies have used SERVQUAL and adaptations of it in a variety of service contexts, including real estate brokers, hospitals and banks (Zeithaml et al., 2006:153). In addition, a Cronbach alpha was used to test reliability of the study. A factor analysis was conducted to ascertain the validity of the questionnaire and all the constructs of the study loaded perfectly. This proved that the questionnaire was valid for the study.

Reliability is often not discussed in qualitative studies. Rather, researchers use the concepts of trustworthiness and credibility. Neuman (2011:214) suggested that in qualitative research, a variety of data sources and multiple measurement methods are used. This is so because different researchers who use alternative measures may find distinctive results because the data collection process is an interactive process in a setting that is highly evolving and the context is dictated by a unique mix

of measures that cannot be replicated. In this study, trustworthiness and credibility were established by thoroughly checking the data, coding, analysing and presenting.

3.19. ETHICAL CONSIDERATIONS

Permission to conduct the research was sought from Transnet and approved by the company's human resource manager. The gatekeeper's letter is very important prior to the commencement of the study as it signifies the authorisation given by the organisation to conduct research. The letter was further used to seek approval of the research proposal by the faculty research committee. Furthermore, informed consent was sought and obtained from the respondents before embarking on the research. Respondents were told that their participation in the study was voluntary and they were free to withdraw at any point without giving reasons for such withdrawal.

3.20. CONCLUSION

Chapter 3 discussed the methodology adopted for this study. The research approach and paradigm for the study were presented to set the tone or trajectory adopted for this study. Research designs encompassing descriptive and exploratory research were discussed and the researcher explained why a mixed method had been adopted for the study. The qualitative and quantitative aspects, target population, and sampling procedures were presented. Furthermore, the data collection processes using the service quality instrument (SERVQUAL) that is based on five dimensions (viz. reliability, tangibles, assurance, reliability, empathy) were discussed. Pilot and pre-testing, data analysis using descriptive and inferential statistics of the study were dissected. Finally, reliability and validity, trustworthiness and credibility and ethical consideration of the study were presented as the bedrock on which this study was founded.

Chapter 4 covers the presentation, data analysis and discussion of the findings of the research.

CHAPTER 4

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1. INTRODUCTION

This chapter presents the results and discusses the findings obtained from the questionnaires administered and interviews conducted in this study. The questionnaire was the primary tool used to collect data and was distributed to 120 research participants and 111 questionnaires were returned. The data collected from the responses was analysed with SPSS version 24.0. The results present the descriptive statistics in the form of graphs, cross-tabulations and other figures for the quantitative data collected. Inferential techniques include the use of correlations and chi-square test values, which have been interpreted using the p-values. Furthermore, 10 telephonic interviews were conducted and the findings of the qualitative section of the study are presented separately in Section 4.9. At the end of the chapter, some preliminary findings are alluded to which are revisited and discussed in the final chapter (Chapter 5).

4.2. THE SAMPLE

In total, 120 questionnaires were despatched and 111 were returned which gave a 92.5% response rate.

4.3. THE RESEARCH INSTRUMENT

The SERVQUAL instrument (see Appendix 4) was used in this study and consisted of 45 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into six questions which measured various themes as illustrated below:

- 1 Biographical data
- 2 Tangibles
- 3 Empathy
- 4 Responsiveness
- 5 Assurance
- 6 Reliability

4.4. DESCRIPTIVE STATISTICS

Descriptive statistics are presented in this section by using graphs and tables. Descriptive statistics are used to describe variables and performed by univariate analysis. Furthermore, frequency tables can be used to describe variables (Patel, 2009:3-4) and in this study graphs have been used to present demographic variables (gender, age and education) and service quality dimensions.

4.4.1. Demographics characteristics of the sample

The profile of respondents includes their gender, age and highest qualification. These are discussed to show the characteristics of the sample.

4.4.2. Gender

Figure 4.1 shows that 97.2% of the respondents were male and 2.8% of the respondents were female. The results indicate that the majority of participants in this study were males.

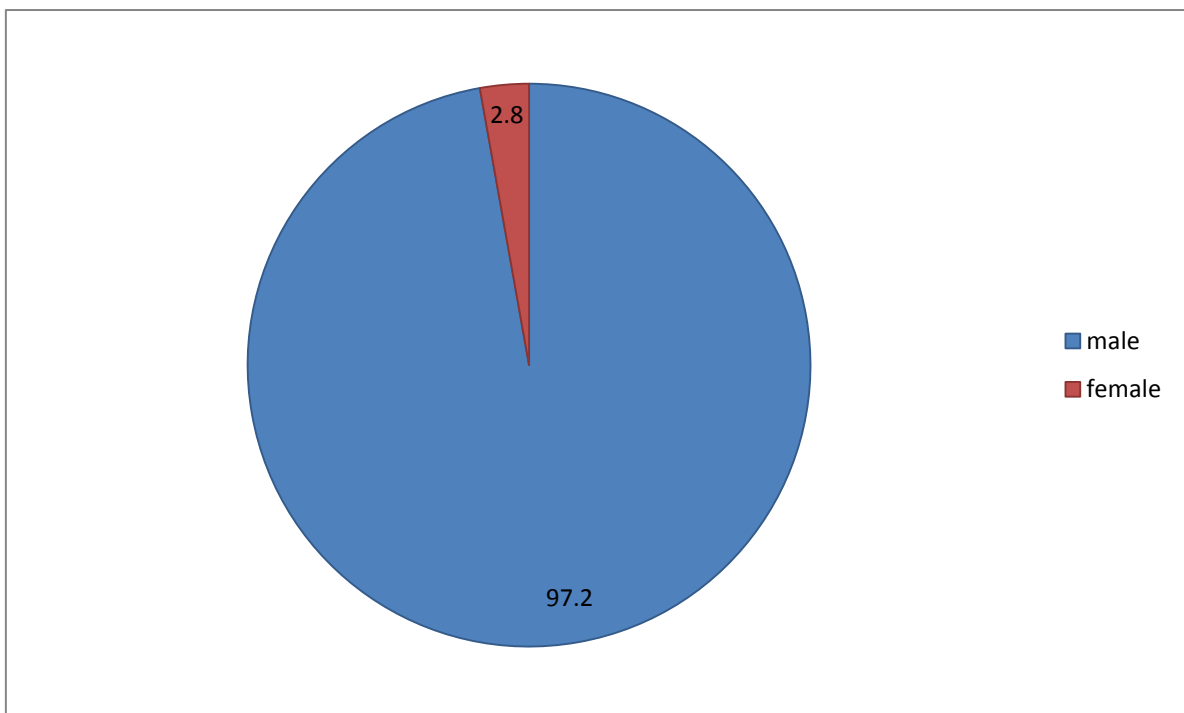


Figure 4.1: Frequency distribution – Gender

4.4.3. Age

Figure 4.2 depicts the age of respondents involved in this study. The results show that 16.4% of the research participants were between the ages of 25 to 34, 62.7% between the ages 35 to 44, 19.4% between the ages of 45 to 54, and 1.5% were aged 55 and above. Thus, the results show that majority of respondents in this study were between the ages of 35 to 44.

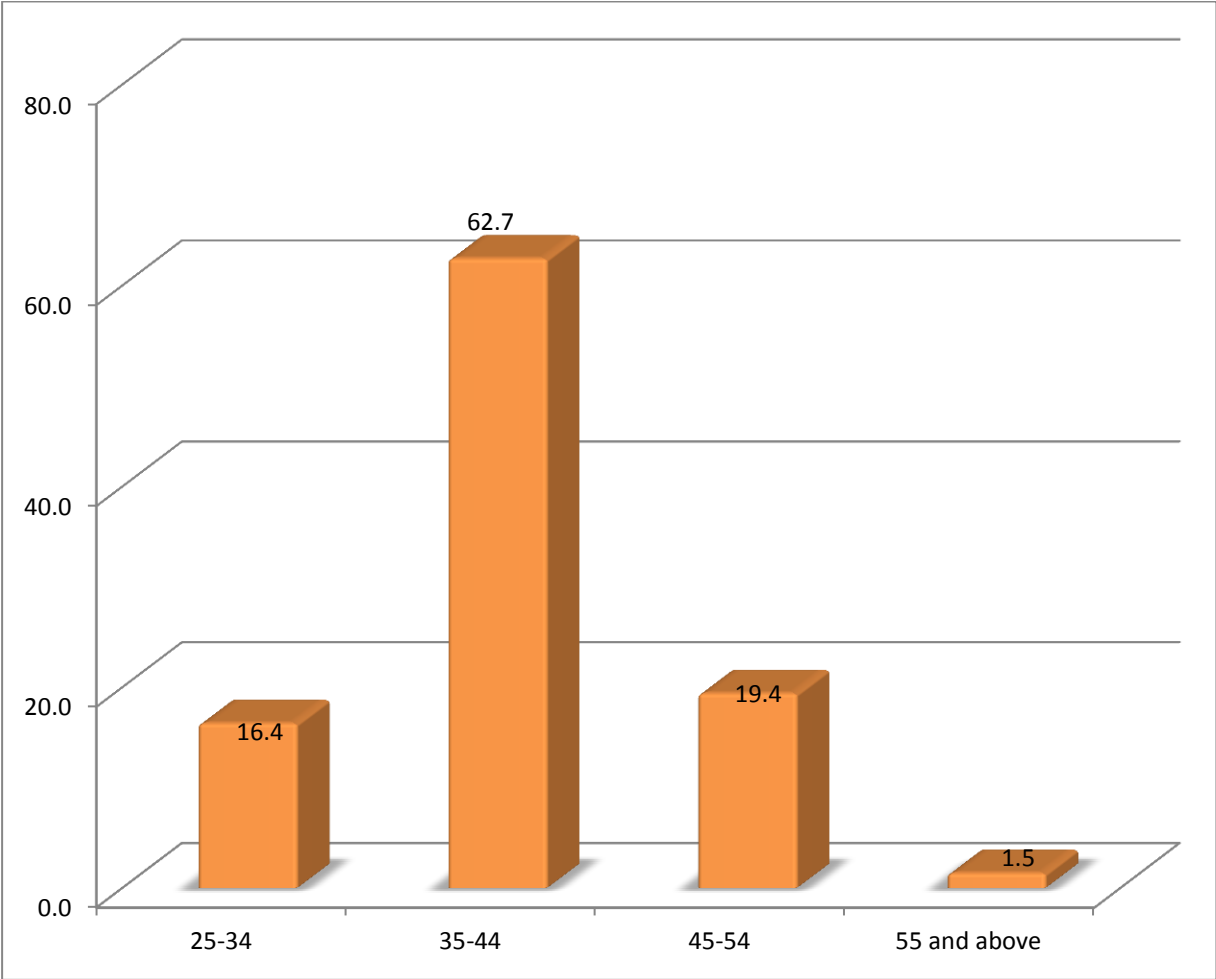


Figure 4.2: Frequency distribution – Age

4.4.4. Cross-tabulation

Cross-tabulation refers to grouped frequency for two variables such as age and gender, as presented in the table below. Cross-tabulation presents absolute figures broken down by categories of two or more variables. Furthermore, it is possible to find percentages in cross-tabulation (Patel, 2009:4). Table 4.1 illustrates that overall,

the ratio of males to females is approximately 19:1 (95.4%: 4.6%). Within the age category of 25 to 34, 90.9% were males and 9.1% were females. Within the category of gender, 16.1% were males between the ages of 25 to 34 and formed 15.4% of the total sample, whereas 33.3% were females between the ages of 25 to 34 and formed 1.5% of the total sample.

Within the age category of 35 to 44 years, 95.1% were male and 4.9% were females. Within the category of gender, 62.9% were males between the ages of 35 to 44 years and formed 60% of the total sample, whereas 66.7% were females between the ages of 35 to 44 and formed 66.7% of the total sample. Within the age category of 45 to 54, 100% were males. Within the category of gender, 21% were males between the age of 45 to 54 and formed 20% of the total sample, as indicated in Table 4.1.

Table 4.1: Cross-tabulation of the respondents’ age and gender

Age * Gender cross-tabulation					
			Gender		Total
			Male	Female	
Age (years)	25-34	Count	10	1	11
		% within Age	90.9%	9.1%	100.0%
		% within Gender	16.1%	33.3%	16.9%
		% of Total	15.4%	1.5%	16.9%
	35-44	Count	39	2	41
		% within Age	95.1%	4.9%	100.0%
		% within Gender	62.9%	66.7%	63.1%
		% of Total	60.0%	3.1%	63.1%
	45-54	Count	13	0	13
		% within Age	100.0%	0.0%	100.0%
		% within Gender	21.0%	0.0%	20.0%
		% of Total	20.0%	0.0%	20.0%
Total		Count	62	3	65
		% within Age	95.4%	4.6%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	95.4%	4.6%	100.0%

4.4.5. Educational qualification level

Figure 4.3 shows the highest qualification of respondents who participated in this study. The findings show that 28.8% of respondents had less than matric as their highest qualification; 42.3% had matric as the highest qualification; 22.5% had a diploma as the highest educational qualification; 36% had a degree as the highest educational qualification and 2.6% of the respondents had other qualifications. The majority of respondents had a matric as their highest qualification.

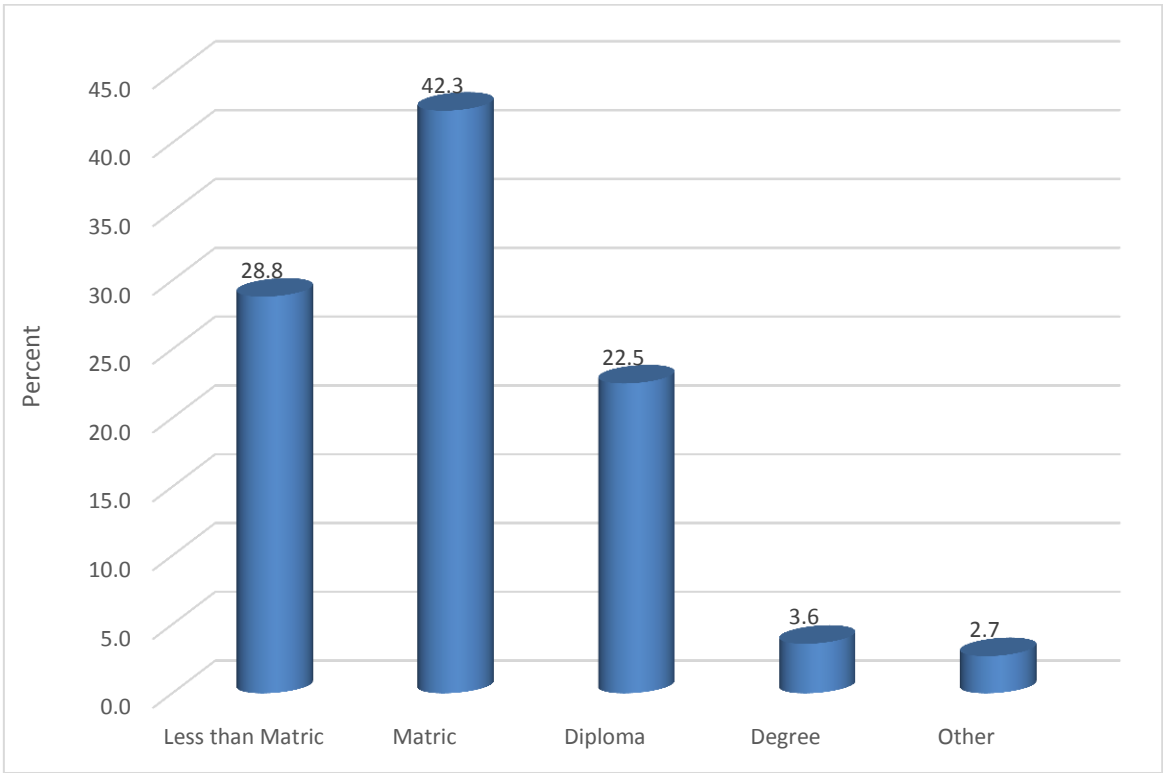


Figure 4.3: Frequency distribution – Highest educational qualification

4.4.6. Frequency of visits to the terminal

Figure 4.4 illustrates that 0.9% of the respondents visit the terminal less than a week and once a week respectively. A total of 98.2% of the respondents visit the terminal more than once in a week. The results imply that the majority of respondents visit the terminal more than once in a week. For this reason there is a need for the service provider to maintain a good and close relationship with the customers because most of them patronise their services from this terminal.

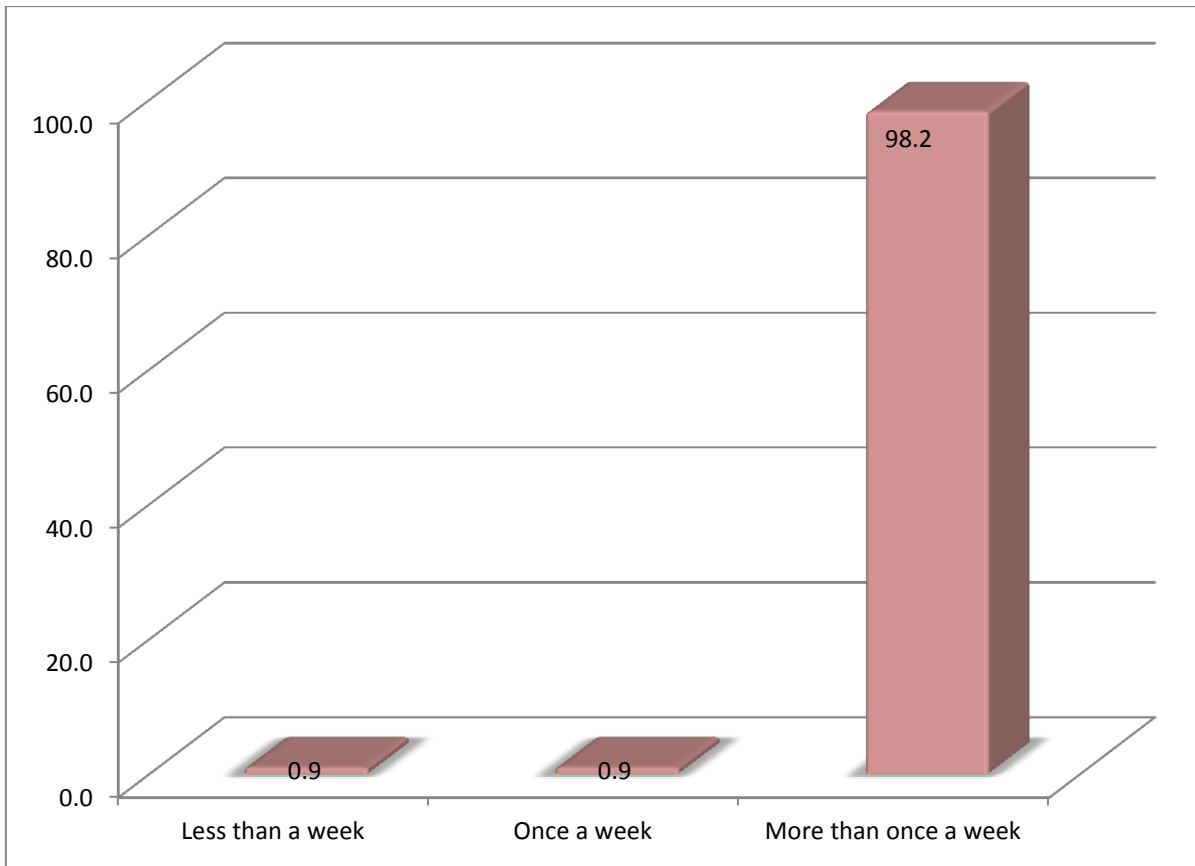


Figure 4.4: Frequency of visits to the terminal

4.4.7. Frequency of most regular transaction

Figure 4.5 shows that 4.6% of the respondents use import as their most regular transaction, 3.7% of the respondents use export as their most regular transaction and 91.7% use both import and export as their most regular transaction. The results indicate that the majority of the respondents use both import and export as their most regular transaction. Thus, particular attention should be given to import and export business as it is attracting a lot of customers. Focusing on one particular portfolio at the exclusion of the other can have negative ripple effects on the business.

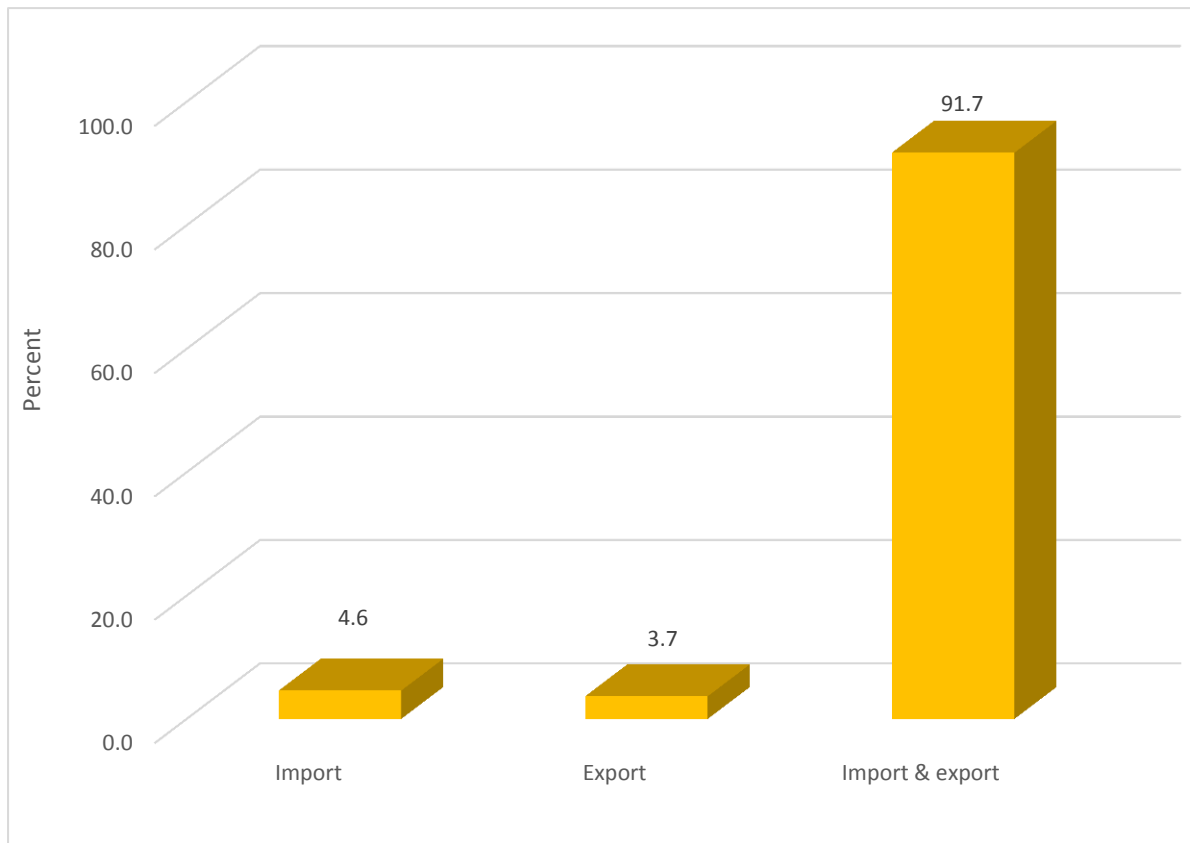


Figure 4.5: Frequency of most regular transaction

4.5. GOODNESS OF THE DATA

The goodness of the data was established by measuring the validity and reliability of the questionnaire.

4.5.1. Reliability statistics

The two most important aspects of precision are **reliability** and **validity**. Reliability is computed by taking several measurements on the same subjects.

Table 4.2: Reliability statistics

	Perception	Expectation
Tangibles	0.759	0.757
Empathy	0.733	0.810
Responsiveness	0.750	0.730
Assurance	0.717	0.813
Reliability	0.793	0.785
Overall	0.871	0.927
Grand Overall	0.810	

Cronbach alpha is the index of reliability and if the coefficient is low as a result of poor correlation, some items should be revised or deleted. A very high alpha may suggest that some items are redundant and testing the same question in a different guise may be necessary. A maximum alpha value of 0.90 is recommended (Tavakol & Dennick, 2011:54). Furthermore, a reliability coefficient of 0.70 or higher is considered as “acceptable” (Kent, 2007:141).

Another school of thought suggests that questions related to a particular factor should correlate positively but should not be perfectly correlated as this would mean that they are measuring the same data (Ghuri & Gronhaug, 2002:69). Table 4.2 reflects the Cronbach’s alpha score for all the items that constituted the questionnaire. The average reliability score for expectation is a coefficient of 0.871 and for perception, the reliability coefficient is 0.785. The overall reliability score for this study is 0.810. The reliability scores for all sections exceed the recommended Cronbach’s alpha value.

4.5.2. Validity

Factor analysis was preformed to establish whether the questionnaire measured the constructs that were intended to be accurately represented. SERVQUAL’s high reliability and consistent factor structures across several independent samples give support for its trait validity (Parasuraman et al., 1988:28).

4.5.3. Factor analysis

Factor analysis is a method for determining underlying constructs that influence the responses on a measured variable (DeCoster, 1998:1). Another school of thought suggests that factor analysis is a statistical method of which the main objective is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. For example, as part of a national survey on political opinions, participants may answer three separate questions regarding environmental policy, reflecting issues at the local, state and national levels. Each question, by itself, would be an inadequate measure of attitude towards environmental policy, but together they may provide a better measure of the attitude (Kent, 2007:176).

Factor analyses are performed by analysing the pattern of correlations (or covariances) between the observed measures. Measures that are highly correlated (either positively or negatively) are likely influenced by the same factors, while those that do not correlate may be influenced by varying factors (DeCoster, 1998:1). Similarly, factor analysis can be used to establish whether the measures do, in fact, measure the same construct. If so, they can then be consolidated to create a new variable or single entity; a factor score variable that contains a score for each respondent on the factor. Factor techniques are applicable to a variety of situations. A researcher may want to know if the skills required to be a decathlete are as varied as the 10 events, or if a small number of core skills are needed to be successful in a decathlon. One need not believe that factors actually exist in order to perform a factor analysis, but in practice the factors are usually interpreted, given names, and spoken of as real things (Tiku & Petch, 2010:943-944; Kent, 2007:176).

The conditions to perform a factor analysis can only be satisfied if the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy value is greater than 0.50 and the Bartlett's test of sphericity is significant ($p < 0.05$). In this study, all the conditions to perform a factor analysis were satisfied. Thus, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value for expectation was 0.798 and the Bartlett's test of sphericity was significant ($\text{Chi-square} = 681.439$, $df = 105$, $p < 0.000$), as shown in Table 4.3.

Table 4.3: Expected KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.798
Bartlett's test of sphericity	Approx. chi-square	681.439
	df	105
	Sig.	0.000

Table 4.4 shows the computation for perception and the findings reveal that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy value was 0.900 and the Bartlett's test of sphericity was significant (Chi-square=874.202, df=105, $p < 0.000$).

Table 4.4: Perceived KMO and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.900
Bartlett's test of sphericity	Approx. chi-square	874.202
	df	105
	Sig.	0.000

4.5.4. Rotated component matrix

Factor analysis is a statistical technique of which the main goal is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. With reference to Table 4.5, principal component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser normalisation. This is an orthogonal rotation method that minimises the number of variables that have high loadings on each factor. It simplifies the interpretation of the factors.

Factor loadings show inter-correlations between variables. Items of questions that loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value) effectively measured along the various components. Kline (1994) observed that a complex variable (cross-loading items) can be retained on the assumption that it is the latent nature of the variable or can be dropped if it poses interpretation challenges. As a matter of fact, loadings only show the direction of correlation but do not affect the interpretation of factor loadings or the decision on the number of factors that can be retained.

The statements that constituted sections of tangibles, empathy, responsiveness, assurance and reliability loaded perfectly along a single component under expectation. This means that all the statements under expectation measured what they set out to measure. The statements that constituted sections of tangibles, empathy and responsiveness loaded perfectly along a single component under perception. This implies that the statements that constituted these sections perfectly measured what they set out to measure for perception. It is noted that the variables that constituted the last two sections for perception (assurance and reliability) loaded along two components. This means that respondents identified different trends within the section. The inability of respondents to differentiate questions constituting a construct or failure to interpret what the actual question is measuring can also contribute to cross loading. Within the section, the splits are colour coded as shown in Table 4.5.

Table 4.5: Rotated component matrix

		Rotated component matrix ^a									
		Component – Expectation					Component – Perception				
		1	2	3	4	5	1	2	3	4	5
The computer system used is fast and easy to understand	Tangibles_1	0.150	0.773	-0.125	-0.015	0.116	0.275	0.249	0.753	0.175	0.041
I experience easy process flow when I visit the terminal	Tangibles_2	0.110	0.821	0.208	0.117	-0.057	0.322	0.024	0.630	0.082	0.506
The physical layout of the terminal is convenient and it reduces delays	Tangibles_3	0.155	0.812	0.230	0.203	0.012	0.156	0.272	0.836	0.107	0.064
Employees are responsive to my questions and complaints	Empathy_1	0.241	0.160	0.026	0.657	0.134	0.595	0.504	0.182	0.014	0.238
I am treated with respect on arrival at the terminal	Empathy_2	0.087	0.049	0.172	0.835	0.047	0.668	0.431	0.268	0.042	0.208
Employees are caring and make me feel like a valued customer	Empathy_3	0.091	0.103	0.412	0.721	0.198	0.693	0.390	0.088	0.003	0.297
Employees are willing to help and follow up on my problem until it is resolved	Responsiveness_1	0.085	-0.006	0.799	0.315	-0.037	0.383	0.719	0.275	0.035	0.098
Important information is always shared with me on time	Responsiveness_2	0.122	0.305	0.731	0.141	0.268	0.231	0.687	0.300	0.090	0.127
There are always enough machines to service us drivers no matter how busy it is	Responsiveness_3	0.445	0.098	0.687	0.081	0.231	0.087	0.776	0.160	0.293	0.154
I feel safe and secure when in the terminal	Assurance_1	-0.062	0.084	0.065	0.138	0.857	0.776	0.219	0.244	0.269	0.000
Employees are professional and knowledgeable when assisting me	Assurance_2	0.417	0.013	0.344	-0.020	0.653	0.448	0.576	0.154	0.398	0.060
I always feel confident I will get assistance if there is a problem	Assurance_3	0.414	-0.035	0.076	0.279	0.641	0.812	0.113	0.176	0.261	0.063
I experience quick turnaround time when in the yard	Reliability_1	0.670	0.380	0.164	0.094	0.256	0.145	0.472	0.147	0.711	0.155
The terminal consistently delivers on promised outputs.	Reliability_2	0.811	0.070	0.138	0.112	0.094	0.328	0.007	0.204	0.687	0.422
The terminal is reliable in meeting operational targets which reduces container dwell time	Reliability_3	0.789	0.214	0.130	0.246	0.030	0.106	0.259	0.099	0.261	0.812

Extraction method: Principal component analysis.
 Rotation method: Varimax with Kaiser normalisation.
 a. Rotation converged in 6 iterations.

4.6. SERVICE QUALITY DIMENSIONS' ANALYSIS WITH GAP SCORES

This section presents the analysis of each dimension with gap scores. Graphs have been used to depict the mean scores of each statement and subsequently the gap scores have been calculated to highlight the difference of customer perception and expectation of each component. Thus, this analysis has been done for each dimension and gap scores calculated. The implication is that gap scores will enable the service provider to deduce the closeness of customer perception and expectation on service quality delivery. Large gaps between expectation and perception indicate a significant deviation which can either positively or negatively influence customer satisfaction.

4.6.1. Dimension: Tangibles

Tangibles are facilities, equipment and materials that must positively portray the status of the organisation (Berndt and Tait, 2014:57). Similarly, Bateson and Hoffman (2011:334) observed that tangibles are multidimensional and encompass facilities and equipment. The mere fact that a service is not a physical product means service providers must demonstrate the availability of tangible cues to enable customers to evaluate the service.

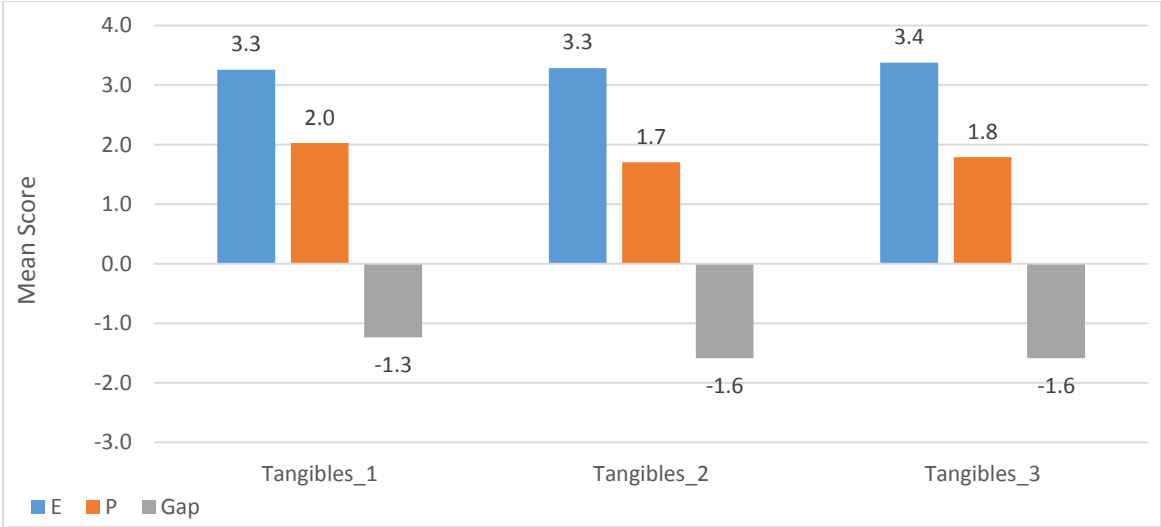


Figure 4.6: Mean scores for tangibles: Expectations vs perceptions

4.6.1.1. *The computer system used is fast and easy to understand*

Figure 4.6 show that Tangibles_1 had an expectation mean score of 3.3 and 2.0 for perception, resulting in a gap score of -1.3. The results show that the majority of customers had higher expectations than perception. This implies that customers had experienced challenges with the computer system and therefore were not happy. Ongori, Iravo and Munene (2013:928) advised organisations to maintain modern up-to-date equipment and tools to facilitate the delivery of quality services. Efficient utilisation of such equipment enables service providers to meet customer needs and at the same time compete favourably with others.

4.6.1.2. *Customers experience easy process flow when they visit the terminal*

Tangibles_2 shows an expectation mean score of 3.3 and 1.7 for perception, resulting in a gap score of -1.6. The majority of customers had higher expectations than perceptions. This means that customers had encountered problems with the process flow at the terminal such that their expectations were not entirely met. Hooper, Coughlan and Mullen (2013:77) observed that it is the responsibility of service managers to ensure that systems and equipment are operating without hiccups due to breakdowns or defects because any bottlenecks in the processes will lead to a poor service evaluation.

4.6.1.3. *The physical layout of the terminal is convenient and reduces delays*

The third item illustrates that the physical layout of the terminal is convenient and reduces delays (Tangibles_3) and this component had an expectation mean score of 3.4 and 1.8 for perception, resulting in a gap score of -1.6 as shown in Figure 4.6 below. The results reveal that the majority of customers had higher expectations than perceptions. This implies that the customers found problems with respect to physical layout of the terminal which contributed to the inconvenience and delays. Molaee, Ansari and Teimuori (2013:8) believe that the physical environment is a visual impetus for achieving quality. In the markets of cut throat competition, physical layout and a well-equipped business environment are key components for achieving customer satisfaction.

4.6.2. Dimension: Empathy

Empathy refers to the ability of an organisation to provide individualised attention and also understanding customers' ever changing or different needs (Bateson & Hoffman, 2011:337).

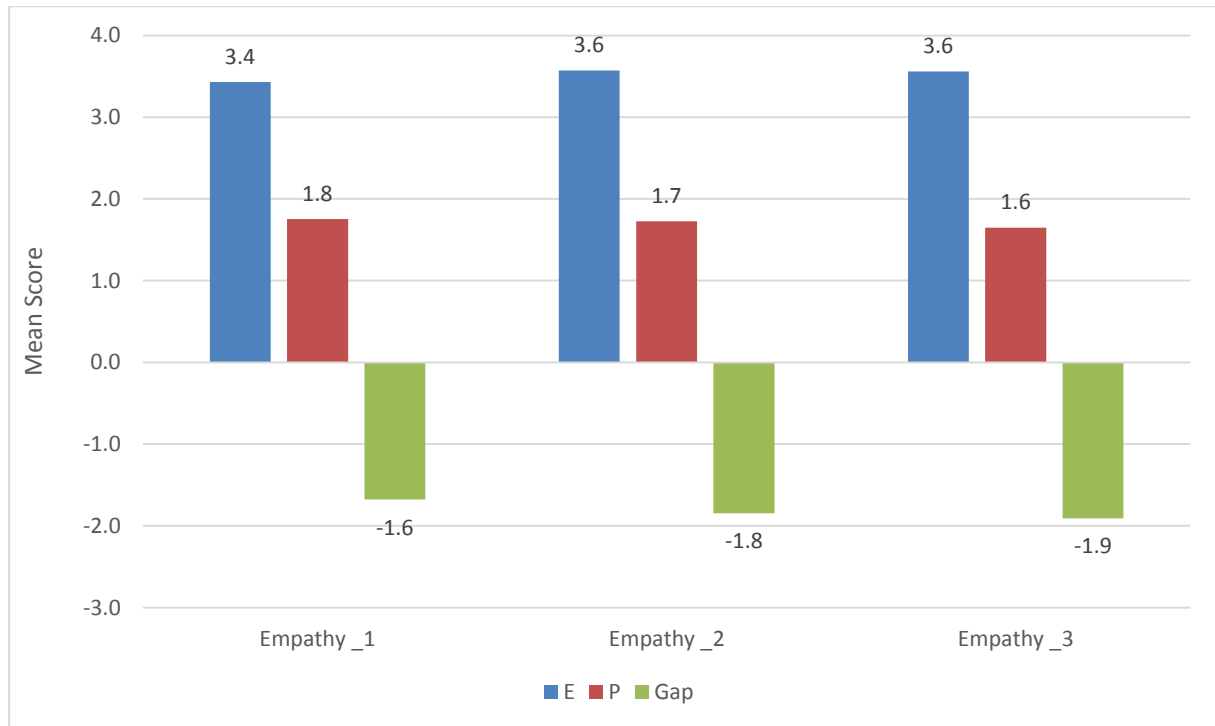


Figure 4.7: Mean scores for empathy: Expectation vs perceptions

4.6.2.1. Employees are responsive to customer questions and complaints

Figure 4.7 shows that Empathy_1 registered an expectation mean score of 3.4 and perception mean score of 1.8, resulting in a gap score of -1.6. The majority of customers had higher expectations than perceptions. This implies that customers were not happy with the way members of staff are handling questions and complaints. Berry, Parasuraman and Zeithaml (1994:39) observed that customers would like to deal with employees who respond quickly to their needs because such behaviour demonstrates a sense of urgency to get things done and to keep the customer satisfied.

4.6.2.2. Customers are treated with respect on arrival at the terminal

Empathy_2, as shown in Figure 4.7, had an expectation mean score of 3.6 and the perception mean score was 1.7, resulting in a gap score of -1.8. This indicates that customer expectations were higher than perceptions. It further shows that customers felt the employees were not treating them with respect on arrival at the terminal. Lucas (2012:59) posited that employees should give customers the respect that is due to them even though they may not always be right about a given issue. Furthermore, being rude to customers will only lead to a poor service quality evaluation and eventually customer attrition.

4.6.2.3. Employees are caring and make one feel like a valued customer

Figure 4.7 shows that the expectation mean score for Empathy_3 is 3.6 and the perception mean score is 1.6, resulting in a gap score of -1.9. This result implies that expectation was higher than perception resulting in a significant gap. The customers felt that the service provider is not doing enough to interact with customers in a manner that demonstrates a caring attitude. This item registered the highest gap score of the three items of the empathy dimension. Munusamy, Chelliah and Mun (2010:402) noted that personal contact between employees and customers is important for the business. The nature of customers as human beings is that they expect empathy from employees; that is to be treated with respect.

4.6.3. Dimension: responsiveness

Responsiveness refers to the ability of a service provider to respond to customer needs timely. The focus for service employees should solely be on the customer and avoid attending to personal issues during a service encounter because such behaviour may lead to delays in responding to customer issues (Bateson & Hoffman, 2011:333).

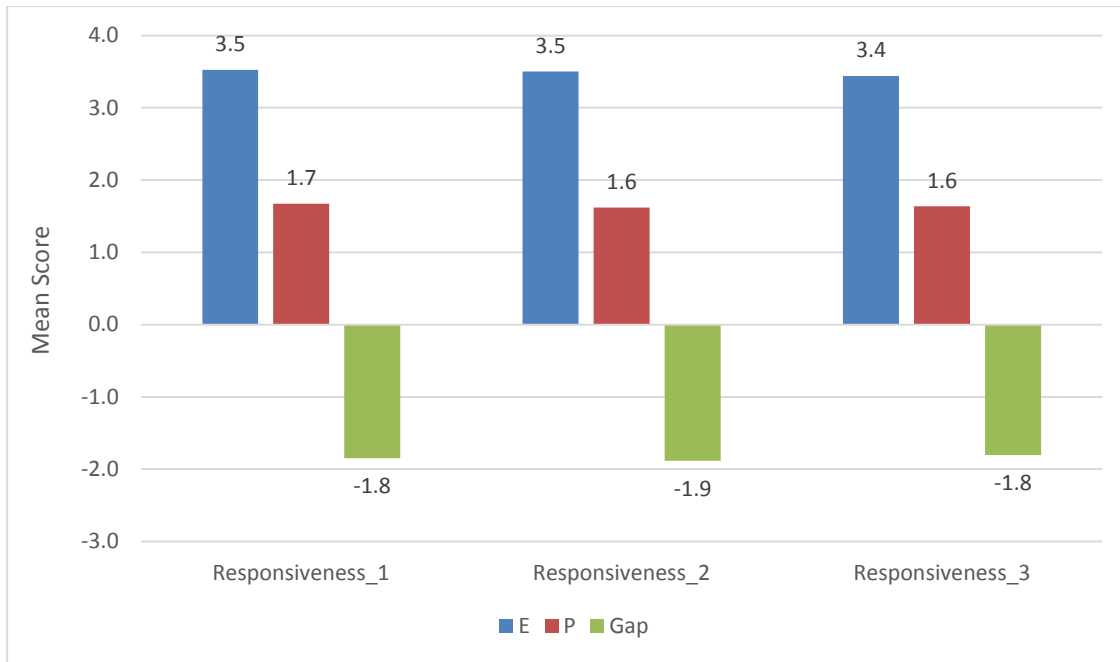


Figure 4.8: Mean scores for responsiveness: Expectations vs perceptions

4.6.3.1. *Employees are willing to help and follow up on a customer problem until it is resolved*

Figure 4.8 illustrates findings pertaining to the responsiveness dimension. Responsiveness_1 shows that the expectation mean score for this item is 3.5 and the perception mean score is 1.7, resulting in a gap score of -1.8. The results indicate that expectations are higher than perceptions. Thus, customers felt the conduct of employees at the terminal leaves a lot to be desired as they had not shown the willingness to help. Munusamy et al. (2010:401) postulated that the non-responsiveness of machines or technology may sometimes be understood by customers but they may not accept the non-responsiveness of human beings or employees. Therefore, it is extremely important to provide customer needs.

4.6.3.2. *Important information is always shared with customers on time*

Figure 4.8 shows that the expectation mean score for this item (Responsiveness_2) is 3.5 and the perception mean score is 1.6, resulting in a gap score of -1.9. The results show that the majority of customers had higher expectations than perceptions. This means that there is a need for improvement because the customers were of the view that the service provider is not doing enough to make

sure that the important information is shared with them timely. Keeping the customer waiting without providing sufficient reasons can be a recipe for the customer’s dissatisfaction and their negative perception of service quality (Javadi & Gol, 2011:120).

4.6.3.3. *There are always enough machines to service drivers no matter how busy it is*

The third item of the responsiveness dimension (Responsiveness_3) indicates that the expectation mean score is 3.4 and the perception score is 1.6, resulting in a gap score of -1.8, as shown in Figure 4.8. The results show that customer expectations are higher than perceptions. This implies that the customers felt the machines are not enough to cater for their business needs at any given point. Zeithaml et al. (2013:90) observed that internal business processes must be crafted to promote responsiveness and a friendly attitude towards clients.

4.6.4. Dimension: Assurance

Assurance refers to the conduct of members of service employees who are able to inspire trust and confidence of customers. Specifically, it refers to the organisation competence to meet the needs of customers and also the quality of the interaction with customers. A key feature of the assurance dimension is security (Bateson & Hoffman, 2011:336-337).

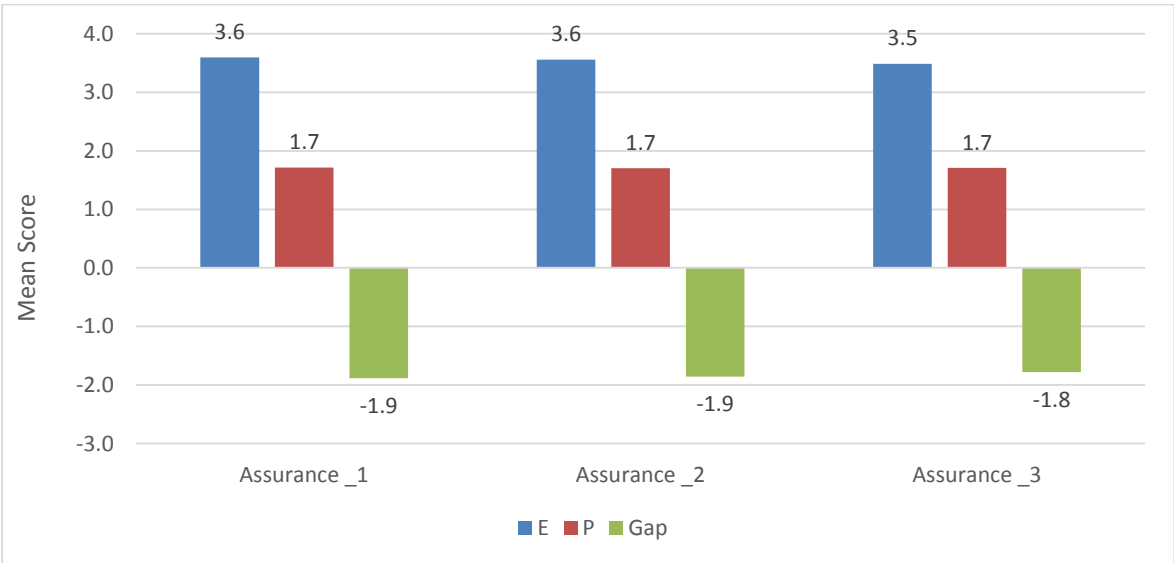


Figure 4.9: Mean scores for assurance: Expectations vs perceptions

4.6.4.1. Customers feel safe and secure when in the terminal

Figure 4.9 presents findings pertaining to the assurance dimension. The first item of the assurance dimension (Assurance_1) shows that the expectation mean score for this item is 3.6 and the perception mean score is 1.7, resulting in a gap score of -1.9. The results clearly show that customer expectations were higher than their perceptions. This entails that the customers do not feel safe and secure when transacting business at the terminal. Perhaps, this is a wake-up call to the management of the terminal to devise new strategies to address this gap. Auka, Bosire and Matern (2013:41) observed that customers' expectations are very high with respect to security and safety of their transactions and would not like to be exposed or prone to manipulation or fraud.

4.6.4.2. Employees are professional and knowledgeable when assisting customers

The expectation mean score for Assurance_2 is 3.6 and the perception mean score is 1.7, resulting in a gap score of -1.9, as shown in Figure 4.9. Customer expectations for this item were higher than perceptions. The implication of this finding is that customers feel that the employees are not professional and do not have the requisite knowledge to facilitate a smooth customer experience. Dehghan, Zenouzi and Albadvi (2012:5) believe that the knowledge of staff in the service being provided is very crucial in assuring customers of the organisation's ability to meet their needs and deliver a quality service

4.6.4.3. Customers always feel confident that they will get assistance if there is a problem

The third item of the assurance dimension (Assurance_3) shows that the expectation mean score for this item is 3.5 and the perception mean score is 1.7, resulting in a gap score of -1.8. The results show that the expectations of the majority of respondents were higher than their perceptions. This means that customers do not feel confident to transact with the current crop of employees and are not getting the assistance that meets or exceeds their expectations when there is a problem. Auka et al. (2013:41) noted that customers prefer to deal with service employees who give them confidence that they are competent to provide a good service. As a matter of fact, failure of assurance with respect to employees' competence erodes the trust

and confidence that customers have and subsequently leads to a poor evaluation of service quality.

4.6.5. Dimension: Reliability

Reliability simply means delivering on promises. According to Bateson and Hoffman (2011:335), service providers can achieve reliability by maintaining the same standards of performance in present and future customer interactions. Furthermore, reliability is considered as a very important dimension of the five dimensions.

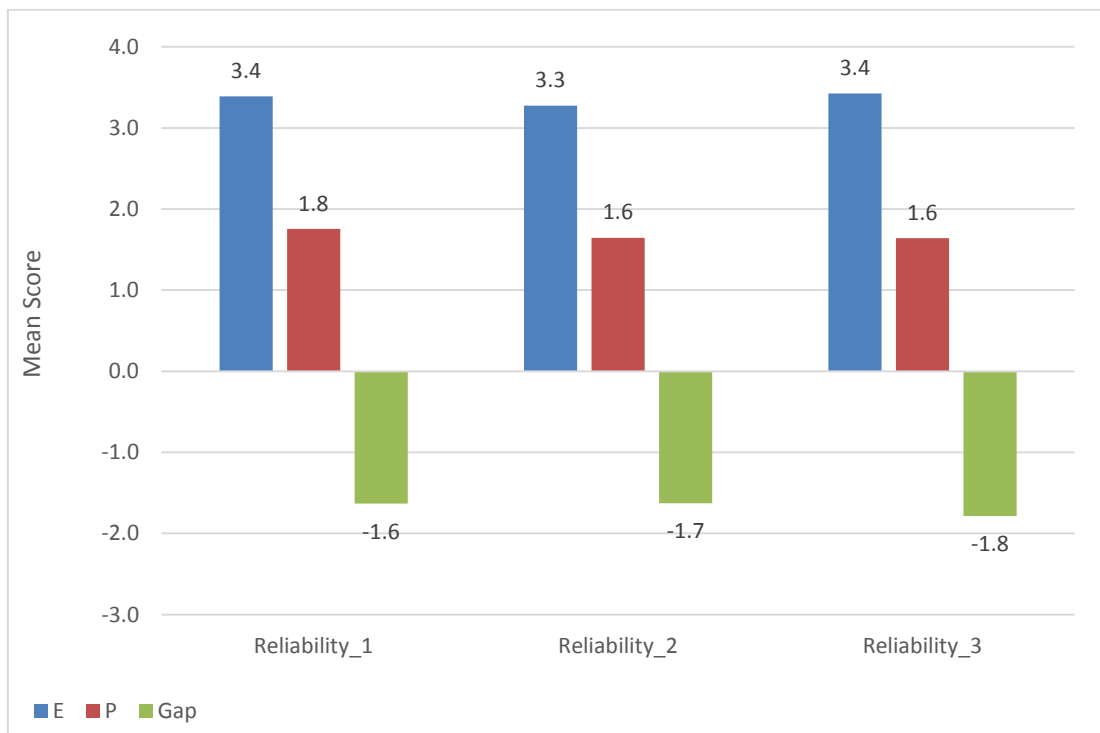


Figure 4.10: Mean scores for reliability: Expectations vs perceptions

4.6.5.1. Customers experience quick turnaround time when in the yard

Figure 4.10 illustrates findings pertaining to the reliability dimension. The first item of the reliability dimension (Reliability_1) shows that the expectation mean score for this item is 3.4 and the perception mean score is 1.8, resulting in a gap score of -1.6. What is evident from the above findings is that the majority of customers had higher expectations than perceptions. The results imply that customers are not impressed with the turnaround time when in the yard and the service is falling short of meeting their expectation. Bloise and Tankersley (2004:78) argued that the degree to which a

service is timeously executed forms the basis for the service provider and quality evaluation by the customer.

4.6.5.2. The terminal consistently delivers on promised outputs

The second item of the reliability dimension (Reliability_2) suggests that the terminal consistently delivers on promised outputs. Figure 4.10 shows that the expectation mean score for this item is 3.3 and the perception mean score is 1.6, resulting in a gap score of -1.7. The findings show that the majority of respondents had higher expectations than perceptions. This implies that the service provider is not delivering accord to the promises that were made to the customers through different platforms. The service offered is more of a lip service and not in tune with a key marketing adage or principle that suggests “don’t promise what you can’t deliver”. Gronroos (2007:277) note that adhering to promises is a key determinant of achieving customer satisfaction and service quality as such management should provide enough resources to employees to enable them to acquire knowledge, skill and motivation to stick to promises.

4.6.5.3. The terminal is reliable in meeting operational targets which reduces container dwell time

The third item of the reliability dimension (Reliability_3) shows that the expectation mean score for this item is 3.4 and a perception mean score of 1.6, resulting in a gap score of -1.8, as highlighted in Figure 4.10. It is clear from the above analysis that the majority of customers had higher expectations than perceptions. With respect to this gap, the customers felt that the service provider is not reliable and fails to meet the operational targets so that containers’ dwell time is reduced. A proper analysis should be done to identify operational hiccups or bottlenecks so that the right strategy is implemented. Berndt and Tait (2014:56) noted that there is a need for service providers to provide a service that is accurate the first time and that promises that have been made to customers must be adhered to and delivered within the set out time frame. If such can be done in a proper manner, customer perceived quality will be enhanced.

4.6.5.4. Overall mean scores for service quality dimensions (Expectation vs perception)

Table 4.6 presents the overall mean score for each dimension. The findings show that expectations were generally high than perceptions. The empathy, responsiveness and assurance dimensions registered the highest expectation mean score at 3.5 respectively, followed by reliability with an overall mean score of 3.4. Tangibles registered the lowest expectation mean score at 3.3. A sharp contrast to the findings on expectations is that tangibles registered the highest perception mean score of 1.8 followed by empathy, assurance and reliability which each had a mean score of 1.7. Responsiveness dimension registered the lowest perception mean score. This implies that there needs to be an undertaking to make improvements to all the dimensions, particularly the responsiveness dimension which registered an actual mean score that is lower than other dimensions. This suggests that customers felt neglected by the way service employees were responding to their issues.

Ironically, the responsiveness dimension registered the highest gap score of -1.9 followed by empathy and assurance with a gap score of -1.8 and reliability with a gap score of -1.7. The lowest gap score was found in the tangibles dimension with a mean of -1.5 as shown in Table 4.6. This simply means that customers think the standards pertaining to the responsiveness dimension are extremely low whereas the tangibles dimension is better than the rest. While it is important to pay particular attention to areas that are in dire need of improvement such as the responsiveness dimension, Msosa and Govender (2015:193) observed that improvements to and monitoring of should apply to all service quality dimensions. The reason for this is that the mere fact that a dimension has been rated highly in the present study does not mean it will guarantee future satisfaction if nothing is done to address the minor problems or gaps. This observation can also be supported by subsequent analysis in Section 4.7 which shows that all the gaps were significant irrespective of one being higher than the other and hence the need to pay attention to all the dimensions.

Table 4.6: Overall mean scores per dimension

Dimension	Expectation	Perception	Gap
Tangibles	3.3	1.8	-1.5
Empathy	3.5	1.7	-1.8
Responsiveness	3.5	1.6	-1.9
Assurance	3.5	1.7	-1.8
Reliability	3.4	1.7	-1.7
Overall	3.4	1.7	-1.7

4.7. QUALITATIVE ANALYSIS

This section presents findings of a qualitative study. The questions were formulated to deepen an understanding of issues that could not be captured by measuring the respondents' views through SERVQUAL. The main issues investigated in the qualitative study centred around terminal efficiency, turnaround time, adhering to promises, challenges they encounter, the level of service quality being delivered at the terminal and the changes they would propose to improve overall terminal service quality or experience. These issues are not a deviation from the SERVQUAL; they are complementary and seek to add more clarity and an in-depth understanding of the underlying problems affecting service quality at the terminal. A total of six structured questions were formulated and responses were elicited from 10 respondents through telephone interviews. The following is the analysis:

4.7.1. How efficiently are your queries resolved?

The responses show that queries are never resolved efficiently at all. Telephonic queries always result in customers calling at least five different numbers before anyone can assist and in some instances even that fifth person doesn't have a clue. The efficiency of queries is totally dependent on a number of factors such as the shift in which it is launched, competence and attitude of the service employees rendering assistance at the material time. Some people are extremely helpful whilst others not and the depth of the actual query is the most pivotal efficiency factor (**R1, R2, R3,**

R4, R5, R6). Bruhn and Georgi (2006:52) believe that responsiveness refers to the organisation's capability to satisfy the customer's wishes.

With respect to correlation of SERVQUAL and the qualitative findings, the results in both the qualitative (Section 4.7.1) and quantitative study (Section 4.6.2.1) show that customers were not satisfied with the way queries are handled. Thus, customer expectations were not met or were higher than the actual performance encountered. The findings show a high degree of consistency in the results obtained from the drivers and the managers of Durban transportation companies.

4.7.2. How satisfied are you with your truck's turnaround time?

Metters et al. (2006:110) pointed out that customer satisfaction is the customers' fulfilment response. The feedback provided shows that at the port it depends on how fulfilled the truck driver was after the service received at in-gate to out-gate or whether they were not satisfied at all with the truck turnaround times at the container terminal. The managers noted that vehicles are frequently staged at the pre-gate for hours, sometimes even up to eight hours or more. Eventually, when vehicles leave the staging area, they encounter standing time at the entrance bridge and then again at the towers. In addition, machinery that is allocated to load or offload trucks is often slow. Breakdowns are too frequent and shift change overs are too long. The feeling is that truck turnaround time is something that can always be improved on by the terminal. The standard 30 to 40 minutes' turnaround time is good; it is reached and continually maintained. However, dissatisfaction arises because there are no ablution facilities or drinking water for their drivers. Another observation is that sanitation is very bad and there is generally poor service from terminal staff **(R1, R2, R3, R4, R5, R6).**

With respect to correlation of SERVQUAL and the qualitative findings, it is apparent that the findings in both the qualitative (Section 4.7.2) and quantitative study (Section 4.6.5.1) show that customers were not satisfied with the turnaround time of the trucks. Thus, customer expectations were not met or were higher than the actual performance encountered. The findings show a consistency in the results obtained from the drivers and the managers of Durban transportation companies.

4.7.3. What challenges do you often come across when transacting at the container terminal?

Harris (2013:17) argued that customer service providers must recognise that customers have different levels of expectations. In this study, the respondents highlighted that in their line of business, time is of utmost importance and the amount of time spent at the terminal waiting for assistance is totally unacceptable. They further observed that Bayhead road is congested on a daily basis and it takes hours to even get to the pre-gate. During this time vehicles engines are running and the loss of diesel is affecting their business profit margins. Sometimes, trucks end up waiting up to 24 hours before being processed and another two hours in the terminal before the truck is serviced. There are many system problems such as containers still showing on trucks even though the transaction has been completed and a gate slip issued as proof. This delays payments with the shipping lines. Another observation is that there are long queues because the Bayhead which leads to the terminal is always congested. When drivers get to the terminal during straddle driver changeover, they have to wait up to 45 minutes before another driver takes the machine to load the truck. This is unnecessary down time which costs their companies a lot of business at the end of the day **(R1, R2, R3, R4, R5, and R6)**.

With respect to correlation of SERVQUAL and the qualitative findings, the results in both the qualitative (Section 4.7.3) and quantitative study (Sections 4.6.2.1, 4.6.5.1 and 4.6.5.3) show that customers were dissatisfied with the truck turnaround time, container dwell time and the flow of work. Thus, customer expectations were not met or were higher than the actual performance encountered. The findings show a high degree of consistency in the results obtained from the drivers and the managers of Durban transportation companies.

4.7.4. What would you say is the level of service quality at the container terminal?

Edvarsson and Enquist (2011) and Khan and Matlay (2009) stated that service excellence refers to the provision of excellent service quality through a management system, exceeding customers' previous expectations and ultimately resulting in not only customer satisfaction but also customer delight and therefore greater customer loyalty. The respondents highlighted that the level of service at the container terminal

is very poor. Delays are caused at every corner and there is no communication or updates from terminal management. System problems, congestion and poor management at the terminal are of great concern. The service quality is never consistent; when it is good it is good but when it is bad it is so bad that no manager can make an effective decision. In addition, they observed that members of staff need to be properly trained at the terminal, otherwise drivers will continue to get a raw deal (R1, R2, R3, R4, R5, R6). Hussain, Al-Nasser and Hussain (2015:8) noted that management of the terminal should know that when customers receive a service that is of good quality, they will be happy and willing to pay a price because high quality entails superior perceived value.

With respect to correlation of SERVQUAL and the qualitative findings, the results in both the qualitative and quantitative study show that the level of service quality at the container terminal is not good. This is evident in both the gap analysis for the overall service quality dimension findings and the views expressed by the managers from the qualitative study. Generally, customers were dissatisfied with all the aspects of service quality. The implication is that customer expectations were not met or were higher than the actual performance encountered. The findings show a high degree of consistency in the results obtained from the drivers and the managers of Durban transportation companies. Koklic et al. (2017:7) suggested that the understanding and monitoring of consumer expectations should be ongoing or continuous because they are subject to change as the business landscape becomes more competitive. Thus, an understanding of customer expectations at the terminal is critical to successfully meeting them to ensure that eventually all the customers will be satisfied.

4.7.5. Would you say the container terminal lives up to the promises made to you, the customer?

One of the respondents answered this question as follows: *“No, the terminal does not live up its promise of ‘delivering freight reliably’. We have in the past made several futile trips to the terminal to pick up containers, only to be told that the container is not found in stack. This results in delays in our delivery system and affects our clients”*. In addition, drivers constantly battle to get hold of staff. When somebody answers they give drivers a run around because of poor communication.

Another observation is that half the time, promises of bulk runs to run containers quicker into the terminal are said to have been cancelled due to congestion **(R1, R2, R3, R4, R5, R6)**. Heller (2007:20) believes that if the terminal fails to stay current with the competition, they may fail to live up to existing customer expectations

With respect to correlation of SERVQUAL and the qualitative findings, the results in both the qualitative (Section 4.7.5) and quantitative study (Section 4.6.5.2) show that customers were dissatisfied with the failure to meet promises made by the terminal to their customers. Thus, customer expectations were not met or were higher than the actual performance encountered. The findings show a high degree of consistency in the results obtained from the drivers and the managers of Durban transportation companies.

4.7.6. What would you change about the quality of service received at the container terminal?

Harris (2013:8) recognised that satisfying internal customers will lead to creating an excellent foundation on which to embark on meeting external customers' desires. The respondents indicated that they believe that the infrastructure of the port needs to be looked at, in terms of entry and exit. More machinery at the towers needs to be in place to service the growing number of trucks. Managers at the terminal need to make better and more informed decisions regarding export stack dates and import storage. Trucks need to be fast tracked into and out the terminal at a faster pace. The terminal should seriously look into paying more attention to staff training. They have a good IT system but it is pointless because the people using it don't seem to know what they are doing. There is a need to change the strategy of the terminal such as a change of shift system – up to an hour waiting period at shift change **(R1, R2, R3, R4, R5, R6)**.

4.8. CONCLUSION

Chapter 4 presented the findings of this study and data were presented both in graphical and tabular form. The study showed a high degree of consistency with an overall reliability score of 0.810. The validity of the questionnaire was also established through a factor analysis. All five service quality dimensions, namely tangibles, empathy, responsiveness, assurance and reliability were analysed and the

findings suggest that customer expectations of service quality dimensions were higher than customer perceptions of the service quality dimension. The empathy, responsiveness and assurance dimensions registered the highest expectation with the same mean score, whereas the tangibles dimension registered the lowest expectation score. On the other hand, the tangibles dimension had the highest perception score and the responsiveness dimension had the lowest perception score.

A gap analysis was also conducted to determine the gaps of service quality per each dimension. The findings revealed that responsiveness had the highest gap and tangibles had the lowest gap. This implies that measures should be put in place to address the shortfalls of all service quality dimensions, particularly the responsiveness dimension.

The qualitative study discussed findings by management of drivers' experiences at the terminal and the results show that most of them are not happy with quality of service being rendered. The results further show that customers are concerned with the efficiency at the terminal, they are not satisfied with the turnaround times and they are facing challenges in terms of congestion which is compounding problems regarding the waiting time before transporters can access the service. Lastly, given an opportunity to change or improve things, customers suggested that there is a need to improve the infrastructure at the terminal.

The next chapter presents the conclusions and recommendations of the study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. INTRODUCTION

In Chapter 4, data were presented and analysed and the findings of this study were discussed. The study sought to analyse customer expectations and perceptions to determine the gaps in terms of service quality delivery. The findings of the study showed that customer expectations were higher than perceptions. Chapter 5 discusses in detail the results and findings in respect to the objectives of the study. Furthermore, limitations of this research and key recommendations for future studies in container terminals which are derived from the study findings are presented.

5.2. SUMMARY OF THE THEORETICAL STUDY

The main aim of this study was to analyse customer perception of service delivery at the Durban Container Terminal. Customer perceptions and expectations were evaluated and a gap analysis conducted. This study could offer management insight into improving the efficiency and effectiveness of service quality and the opportunity to address any issues impacting the quality service at the container terminal. In doing so, the terminal could increase their retention of existing customers.

Chapter 2 provided an overview of service quality at the container terminal. Information obtained from reviewing the literature enabled a discussion on the characteristics and dimensions of service quality and the importance for organisations to maintain high standards according to customers' expectations. The gap analysis was discussed, which is a fundamental tool for management to use in identifying the customer service problems or service challenges experienced by the customers. The Gaps Model of service quality indicated how the gaps occur. Gap 5, which is the difference between customers' expectations and their perceptions of service quality, was outlined as the most important gap to be closed in order to improve service quality in the terminal.

Chapter 4 presented results of a gap analysis of service quality and the findings show customers' perceptions to be consistently lower than their expectations. Table 4.6 indicates the gaps of all the dimensions and clearly shows the dimensions that

had the largest gaps and those that had the lowest gaps. These negative gaps imply that the delivery of service quality is not satisfactory and hence there is a need for the management of the terminal to make improvement to ensure that customer expectations are met and exceeded.

5.3. SUMMARY OF THE EMPIRICAL STUDY

Chapter 4 analysed and presented results of the study undertaken. The study was carried out using a mixed methodology where management of transporting companies was telephonically interviewed and their responses captured and analysed. Furthermore, a total of 120 questionnaires were distributed to truck drivers at the staging area, at a container terminal in Durban and 111 were returned. This research was conducted on general aspects of customer services quality at the container terminal. The origin of this research was to determine if a gap exists between customers' expectations of service quality and the actual service delivered by the container terminal.

From the results it is noted that there are important aspects of service quality that the terminal must address in order to provide improved customer service and satisfaction. The study was conducted following the gathering of primary and secondary data, the analysis of data from respondents and the interpretation of study results as well as report writing.

5.4. DISCUSSION ON ACHIEVEMENT OF RESEARCH OBJECTIVES

Having stipulated the research objectives in Section 1.5, the discussion below highlights how the set objectives were achieved in this study.

5.4.1. Investigate customers' expectations of services rendered at a container terminal

The results presented in Chapter 4 show that respondents' expectations exceeded their perceptions of the service quality rendered at the terminal. This implies that improvements should be made on all the five dimensions of service quality. The reality is that customers expect excellent service all the time and the responsibility to deliver and exceed customer expectation rests with the staff working at the terminal. Thus, if customer expectations of service quality are consistently higher than

perceptions, it means the actual service being delivered at the terminal is substandard and will eventually result in dissatisfaction. Table 4.6 of Chapter 4 shows that all the mean scores of customer expectation were higher than perception.

5.4.2. Ascertain customers' perception of services rendered at a container terminal

The literature review indicated that the process of service quality delivery is influenced by the five dimensions: tangibility, reliability, responsibility, assurance and empathy. The literature review explained all five dimensions and emphasised their importance in the delivery of service quality. Transporters' perceptions, in terms of service quality at the container terminal, were tested and analysed in Chapter 4. The results show that the respondents' perceptions of the five service quality dimensions at the container terminal were lower than their expectations. This indicates that the truck drivers are not receiving the desired quality service at the container terminal. Table 4.6 shows that the mean scores of customer perception of service quality were lower than expectation.

5.4.3. To evaluate gaps between expectation and perception of service delivery at the container terminal

The basis of this research was to determine whether a gap exists between customers' expectation of service quality and expectation at the container terminal in Durban. Chapter 2 presented a review of the research of Parasuraman et al. (1988:13) on the Gaps Model of service quality, which uses SERVQUAL as a preferred instrument in measuring the gap between customers' expectations and perceptions of the five dimensions: tangibility, reliability, responsibility, assurance and empathy. The findings of the study show negative gaps because customer expectations were higher than their perceptions across all five dimensions. The responsiveness dimension had the highest gap whereas the tangibles dimension had the lowest gap. While it is important to pinpoint the terminal's underperformance of the responsiveness dimension if compared to other dimensions and the need to channel more resources towards improving this dimension, it is critical for the service provider to make improvements on all the dimensions. The management of the terminal should provide resources that will enable closing of all the gaps. Table 4.6 shows the mean gap scores of all five dimensions.

5.4.4. To analyse customers' experiences of services rendered at a container terminal through a qualitative approach

The results of the qualitative study show that customers are not happy with the current level of service being delivered at the terminal. In other words, the experience that truck drivers have to undergo in order to access the service is appalling as they have to wait for many hours to be assisted. Furthermore, congestion is one of the major challenges being experienced at the terminal as the Bayhead road always has a lot of traffic. Respondents also complained of system problems which in some cases delay movement of trucks and payments from freight companies. There are many challenges which the management of the terminal could look into and come up with new strategies to deal with the bottlenecks and ultimately guarantee satisfaction for their customers.

5.5. RECOMMENDATIONS

Based on the research findings, the following recommendations are made:

5.5.1. Appointment booking system

According to findings in the study, transporters are complaining of long queues at the staging area. It is recommended that management implement an appointment booking system. It should be mandatory for all transporters to use the booking system when coming to the terminal as in that way traffic will be minimised on the main road leading to the terminal. The computer system will work out certain volumes to be picked up at a given hour so that each transporter will come to the terminal to meet their deadline only and not flood the road to the terminal. That way congestion will be avoided.

5.5.2. Shift changeover

From the findings it is clear that truck drivers are unhappy with the amount of time they spend at the terminal during shift change and when straddle drivers are changing, that is a change of first and second up straddle drivers, and vice versa. It is recommended that management implement a shift overlap of 30 minutes between driver changeovers. It is suggested to have at least three operators per tower to continue working during changeover; in doing so the terminal management will

ensure that there is no down time during this time and the terminal actually operates 24 hours as promised.

5.5.3. Computer screens

It is recommended that management put up computer screens at the staging area that will serve as an update for truck drivers updating transporters on the number of trucks that are inside the terminal as well as which lane into the terminal is about to be released. By doing so, this will keep drivers up to date on what is happening inside the terminal and maybe understand why there are delays, if any.

5.5.4. Tangibles

Findings indicate that customers are unhappy with the terminal tangibles which include but are not limited to machinery that load and off load trucks at the terminal. Truck drivers complain that machines break down for most part of the shift. The quality of the machines needs to be looked into. The technical department needs to keep records of all services on machinery as well as records of replaced original parts. If need be, terminal management need to look at buying a different brand of straddles that will endure a 24-hour operation with minimal breakdowns.

5.5.5. Providing staff with knowledge

The morning shift supervisors at the staging area must make sure that they receive updated import storage and export stack dates. The supervisors must update their subordinates of any changes during the 'green area' meetings at the beginning of each shift. This will equip the staff members to answer all queries and provide guidance should they need to direct drivers elsewhere. Secondly, it is advisable to send staff on a customer service course to teach them the importance of treating both internal and external customers with respect and dignity.

5.5.6. Responsiveness to customer complaints

Findings show that customers are dissatisfied with the way their complaints are being handled. The communications department together with customer service department should inform transporters of proper channels of communication and offer contact numbers of all managers on each shift. If customers are misinformed they will not follow proper protocol when complaining or complimenting any staff

member or department. This will only be known by the customer if it is shared with them. If the customer has the contact number for each respective manager's department and shift it is easy to hold staff members accountable for an unsatisfactory level of service.

5.5.7. Reliability

It is imperative to implement reliability both in the interest of customer satisfaction and of high quality service, which means meeting the agreed deadlines, handling customer complaints in a professional manner as well as solving all customer problems.

5.5.8. Empathy

From the results in Chapter 4, it is evident that drivers are unhappy with the way they are treated by terminal employees. Most of the truck drivers feel that they are being undermined when at the terminal. Management needs to put training workshops in place to educate employees on treating the customer right. From telephone etiquette to dress code, these are all indirect contributors to how the customer views the business and therefore it is important to maintain a positive image of the terminal at all times. If employees are educated on these values, it will be by default that they will strive to please customers and show empathy when dealing with them at all times. This all lies with the training department to facilitate grooming programmes for employees.

5.6. LIMITATIONS OF THE STUDY

The study focused only on the greater Durban area, but the findings may be broadly applied. The study was conducted on secondary customers of the container terminal in Durban. There is no substantial amount of data as there are only a few current publications of service quality in container terminals especially from the side of transporters. There is however a sufficient amount of information about service quality in general.

5.7. RECOMMENDATION FOR FURTHER RESEARCH

It is recommended that another study be conducted for a more in-depth exploration on service delivery and its impact on transporting companies in container terminals. It

is suggested that further studies be qualitative in nature where respondents will be able to elaborate more about the service delivery they receive, as the questionnaire has closed questions that do not provide much room to be elaborate.

The study raises new questions for research. In the study, the responsiveness dimension was found to be relatively more important than reliability, assurance, tangibles and empathy. This finding stresses the fact that transporters value information sharing as the most important factor in service delivery at the container terminal in the Durban area.

Furthermore, future research may also look at whether the perceived and expected service quality levels differ between South African truck drivers and foreign truck drivers. What South Africans view as important aspects in service delivery may be different from other nationals, for example an element of where one was raised may result in different outlooks on service delivery. Therefore, further research is recommended.

5.8. CONCLUSION

This study has highlighted the expectations and perceptions of truck drivers that bring import and export containers to the container terminal in Durban. Issues relating to the delivery of service quality and the gap scores were discussed. The importance of service quality delivery is crucial in terminals as this a competitive business and it has to benchmark with other global terminals. In today's unpredictable economy, providing excellent service delivery may be the only factor that sets the Durban terminal apart, thus gaining a competitive advantage.

The recommendations and conclusions discussed in this chapter represent some of the measures that could possibly be implemented by the terminal to improve the delivery of service quality. This study will have a positive impact on the delivery of service quality, which will assist terminal managers to increase customer satisfaction at the container terminal in the Durban area.

LIST OF REFERENCES

- Abbasi, M., Khan, M. & Rashid, K. 2011. Employee Empowerment, Service Quality and Customer Satisfaction in Pakistani Banks. *IUP Journal of Bank Management*, 10(4), 47-60.
- Academic Technology Services (ATS). 2002. *Introduction to SAS*. UCLA: Statistical Consulting Group.
- Ahmed, P. & Rafiq, M. 2003. Internal marketing issues and challenges. *European Journal of Marketing*, 37(9), 1177-1186.
- Al Khattab, S.A. & Aldehayyat, J.S. 2011. Perceptions of Service Quality in Jordanian Hotels. *International Journal of Business and Management*, 6(7), 226-233.
- Ali, M.H., Ali, N.A. & Radam, A. 2010. Validating SERVPERF in Government Agencies. *Journal of Human Resources and Adult Learning*, 6(1), 84-93.
- Alzola, L.M. & Robaina, V.P. 2005. Servqual: Its Applicability in Electronic Commerce B2C. *The Quality Management Journal*, 12(4), 46-57.
- Amaratunga, D., Baldry, D., Sarshar, M. & Newton, R. 2002. Quantitative and Qualitative Research in the Built Environment: Application of "Mixed" Research Approach. *Work Study*, 51(1), 17-31.
- Andronikidis, A. & Bellou, V. 2010. Verifying Alternative Measures of the Service-Quality Construct: Consistencies and Contradictions. *Journal of Marketing Management*, 26(5-6), 570-587.
- Arasli, H.A., Mehtap-Smadi, S. & Katircioglu, S.T. 2005. Customer Service Quality in the Greek Cypriot Banking Industry. *Journal of Managing Service Quality*, 15(1), 41-56.
- Armstrong, G. & Kotler, P. 2011. *Marketing: An Introduction*. 10th ed. New York: Pearson.
- Armstrong, B. 2015. Corporate governance and state owned enterprises: How improvements in SOEs can help emerging markets address their development challenges. *Ethical Boardroom*, Spring.

- Arokiasamy, A. & Abdullah, A. 2013. Service Quality and Customer Satisfaction in the Cellular Telecommunication Service Provider in Malaysia. *Researchers World*, 4(2) 1-9.
- Auka, D.O., Bosire, J.N. & Matern, V. 2013. Perceived Service Quality and Customer Loyalty in Retail Banking in Kenya. *British Journal of Marketing studies*, 1(3), 32-61.
- Baron, M.A. 2008. *Guidelines for writing research proposals and dissertations* (pp. 1-52). USA: Division of Educational Administration, University of South Dakota.
- Bateson, J.E.G. & Hoffman, K.D. 2011. *Services marketing*. 4th ed. Texas: South Western Cengage Learning.
- Bernard, H. 2002. *Research methods in anthropology: Qualitative and quantitative methods*. 3rd edition. California: Alta Mira Press.
- Berndt, A & Tait, M. 2014. Relationship marketing and customer relationship management. 3rd ed. Cape Town: Juta & Company.
- Berry, L.L., Parasuraman, A & Zeithaml, V.A. 1994. Improving service quality in America: Lessons learned. *Academy of Management Executive*, pp. 32-52.
- Berry, L.L. Parasuraman, A. 1991. *Marketing services: Competing through quality*. New York. The Free Press.
- Bhote KR. 1996: *Beyond customer satisfaction to customer loyalty. The key to greater profitability*. New York: AMA Membership Publications Division.
- Blose, J.E. & Tankersley, W.B. 2004. Linking Dimensions of Service Quality to Original Outcomes. *Managing Service Quality*, 14(1), 75-89.
- Bodet, G. 2006. Investigating Customer Satisfaction in a Health Club Context by an Application of the Tetraclasse Model. *European Sport Management Quarterly*, 6(2), 149-165.
- Bruhn, M. & Georgi, D. 2006. *Service marketing: Managing the service value chain*. London: Prentice-Hall, Pearson Education Limited.
- Bryman, A. & Bell, E. 2007. *Business research methods*. 2nd ed. New York: Oxford University Press.
- Burns, A.C. & Bush, R.F. 2014. *Marketing research*. 7th ed. Boston: Pearson.

- Cant, M.C., Brink, A. & Brijball, S. 2002. *Customer behaviour: A South African perspective*. Cape Town: Juta.
- Carman, J.M. 1990. Consumer Perceptions of Service Quality: An Assessment of the Servqual Dimensions. *Journal of Retailing*, 66(1), 33-55.
- Chau, V.S. & Kao, Y.Y. 2009. Bridge Over Troubled Water or Long and Winding Road? Gap-5 in Airline Service Quality Performance Measures. *Managing Service Quality*, 19(1), 106-134.
- Chowdhary, N. & Prakash, M. 2007. Prioritizing Service Quality Dimensions. *Managing Service Quality*, 17(5), 493-509.
- Churchill, G.A., Brown, T.J. & Suter, T.A. 2010. *Basic marketing research*. 7th ed. Mason, Ohio: Southern-Western Cengage Learning.
- Clow, K.E. & James, K.E. 2014. *Essentials of marketing research: Putting research into practice*. Thousand Oaks, CA: Sage.
- Cohen, D., Gan, C., Yong, H.H.A. & Choong, E. 2006. *Customer satisfaction: A study of bank customer retention in New Zealand*. Discussion paper no. 109, March.
- Coy, R. W. 2004. Managing Customer Expectations in the Service Encounter. *International Journal of Service Industry Management*, 15, 1, 54-71.
- Cronin, J. & Taylor S.A. 1992. Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56, 55-68.
- DeCoster, J., 1998. *Overview of factor analysis*. <http://www.stat-help.com/factor.pdf>.
- Dehghan, A., Zenouzi, B. & Albadvi, A. 2012. An Investigation on the Relationship Between Service Quality and Customer Satisfaction: In the Case of CCG Company. *International Business Research*, 5(1), 3-8.
- Dhurup, M., Singh, P. & Surujlal, J. 2006. Customer Service Quality at Commercial Health and Fitness Centres. *South African Journal for Research in Sport*, 28(2), 39-55.
- Du Plessis, P.J., Strydom, J.W. & Jooste, C.J. 2011. *Marketing management*. 6th ed. Cape Town: Juta.

- Edvardsson, B. & Enquist, B. 2011. The Service Excellence and Innovation Model: Lessons from IKEA and Other Service Frontiers. *Total Quality Management & Business Excellence*, 22(5), 535-551.
- Ferrell, O.C. & Hartline, M.D. 2011. *Marketing management strategies*. 5th ed. Mason, Ohio: South-Western Cengage Learning.
- Fitzsimmons, J.A. & Fitzsimmons, M.J. 2006. *Service management: Operations, strategy, information technology*. 5th ed. Singapore. McGraw-Hill.
- Ganesan-Lim, C., Russell-Bennett, R. & Dagger, T. 2008. The Impact of Service Contact Type and Demographic Characteristic on Service Quality Perceptions. *Journal of Services Marketing*, 22(7), 550-561.
- Gaur, S.S. & Agrawal, R. 2006. Service Quality Measurement in a Retail Store Context: A Review of Advances Made Using Servqual and RSQS. *The Marketing Review*, 6, 317-330.
- Gee, R.C., Coates, G. & Nicholson, M. 2008. Understanding and Profitably Managing Customer Loyalty. *Journal of Marketing Intelligence Planning*, 26(24), 359-374.
- Gerber, K. & Bothma, N. 2008. *Marketing communication*. New Jersey: John Wiley & Sons.
- Ghuri, P.N. & Grønhaug, K. 2002, *Research methods in business studies: a practical guide*, 2nd edn, Financial Times/Prentice Hall, Harlow, Essex ; Cape Town.
- Ghobadian, A., Speller, S. & Jones, M. 1994. Service Quality Concepts and Models. *International Journal of Quality & Reliability Management*, 11(9), 43-66.
- Golder, P.N., Mitra, D. & Moorman, C. 2012. What is quality? An integrative Framework of Processes and States. *Journal of Marketing*, 76(4), July, 1-2.
- Gouthier, M., Giese, A. & Barl, C. 2012. Service Excellence Models: A Critical Discussion and Comparison. *Journal of Service Theory and Practice*, 22(5), 447-464.
- Gronroos, C. 2007. *Service management and marketing: Customer management in service competition*. 3rd ed. West Sussex: John Wiley & Sons, Ltd.
- Gupta, A. & Dev, S. 2012. Client Satisfaction in Indian Banks: An empirical study. *Management Research Review*, 35(7), 617-636.

- Gupta, S. & Zeithaml, V. 2006. Customer Metrics and Their Impact on Financial Performance. *Marketing Science*, 25(6), 718-739.
- Guzzo, R. 2010. Customer Satisfaction in the Hotel Industry: A Case Study from Sicily. *International Journal of Marketing Studies*, 2(2), 85-97.
- Hair, J., Money, A., Page, M. & Samouel, P. 2007. *Research methods for business*. West Sussex: John Wiley & sons, Ltd.
- Harris, E.K. 2013. *Customer service: A practical approach*. 6th ed. New Jersey: Prentice-Hall.
- Hartline, M. & Ferrell, O.C. 1996. The Management of Customer-Contact Service Employees: An Empirical Investigation. *Journal of Marketing*, 60(4), 52-70.
- Haycox, C. 2011. *The importance of customer service*. [Online]. Retrieved August 20, 2017: <http://www.businessstoolchest.com/articles/data/20110222190932.shtml>
- Heller, E.K. 2007. *Customer service: A practical approach*. London: Pearson Prentice-Hall.
- Hooper, D., Coughlan, J. & Mullen, M.R. 2013. The Service Scape as an Antecedent to Service Quality and Behavioural Intentions. *Journal of Services Marketing*, 27(4), 271-280.
- Hussain, R., Al Nasser, A. & Hussain, Y.K. 2015. Service Quality and Customer Satisfaction of a UAE-Based Airline: An Empirical Investigation. *Journal of Air Transport Management*, 42, 167-175.
- Hyde, K. 2000. Recognising Deductive Processes in Qualitative Research, Qualitative Market Research. *International Journal of Business*, 3(2), 82-90.
- Javadi, M.H. & Gol, R. 2011. Service Quality Evaluation in General Department of Health Insurance of Fars Province Using a SERVQUAL Model (Case Study: Shiraz). *Interdisciplinary Journal of Contemporary Research in Business*, 3(4), 118-125.
- Jobber, D. & Ellis-Chadwick, F. 2013. *Principles and practice of marketing*. 7th ed. Maidenhead: McGraw-Hill.
- Johnson, T. 1999. *How to pass customer service*. PU: LCCI Examinations Board.
- Kang, G. 2006. The Hierarchical Structure of Service Quality: Integration of Technical and Functional Quality. *Managing Service Quality*, 16(1), 37-50.

- Kent, R. 2007. *Marketing research: Approaches, methods and applications in Europe*. 1st ed. London: Thomson Learning.
- Khan, H. & Matlay, H., 2009. Implementing Service Excellence in Higher Education. *Education + Training*, 51(8/9), 769-780.
- Kilbourne, W.E., Duffy, J.A., Duffy, M. & Giarchi, G. 2004. The Applicability of Servqual in Cross-National Measurements of Healthcare Quality. *Journal of Services Marketing*, 18(6-7), 524-533.
- Kim, H.J. 2011. Service Orientation, Service Quality, Customer Satisfaction, and Customer Loyalty: Testing a Structural Model. *Journal of Hospitality Marketing and Management*, 20(6), 619-637.
- Kline, P. 1994. *An easy guide to factor analysis*. New York, NY: Routledge.
- Koklic, M.K., Kukar-Kinney, M. & Vegelj, S. 2017. An Investigation of Customer Satisfaction with Low Cost and Full Service Airline Companies. *Journal of Business Research*, 80(C), 188-196.
- Kotler, P. & Keller, K. 2012. *Marketing management*. 14th ed. Essex: Pearson.
- Kumar, M., Kee, F. & Manshor, A. 2009. Determining the Relative Importance of Critical Factors in Delivering Service Quality of Banks: An Application of Dominance Analysis in Servqual Model. *Managing Service Quality*, 19(2), 211-228.
- Kurtz, L.D. & Clow, K.E. 2002. *Services marketing*. New York: John Wiley and Sons Incorporated.
- Ladhari, R. 2009. A Review of Twenty Years of Servqual Research. *International Journal of Quality and Service Sciences*, 1(2), 172-198.
- Lewis, J. & Sheppard, S. 2006. Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? *Landscape and Urban Planning*, 77(6):291–313
- Linton, I. 1993. *Building customer loyalty*. London: Pitman Publishing.
- Lu, J., Gong, X. & Wang, L. 2011. An Empirical Study of Container Terminal's Service Attributes. *Journal of Service Science and Management*, 4(1), 97-109.
- Lucas, R.W. 2012. *Customer service skills for success*. 5th ed. New York: McGraw-Hill.

- Machado, R. & Diggins, C. 2012. *Customer service*. Lansdowne, South Africa: Juta.
- Malhotra, N.K. 2010. *Marketing research: an applied orientation*. 6th ed. Eaglewood Cliffs: Prentice Hall.
- Mansourian, Y. & Madden, A. 2007. Methodological Approaches in Web Search Research. *Electronic Library*, 25(1), 90-101.
- Manville, B. & Ober, J. 2003. Beyond Empowerment: Building a Company of Citizens. *Harvard Business Review*, 81(1), 48-53.
- Marshall, G.W. & Johnston, M.W. 2010. *Marketing management*. Boston: McGraw-Hill.
- Martinez, J.A. & Martinez, L. 2010. Some Insights on Conceptualising and Measuring Service Quality. *Journal of Retailing and Consumer Services*, 17(1), 29-42.
- Maxine, P., Doku, V. & Tennakoon, L. 2003. Challenges in Recruitment of Research Participants. *Journal of Advances in Psychiatric Treatment*, 9(3), 229-238.
- Metters, R., King-Metters, K., Pullman, M. & Walton, S. 2006. *Successful service operations management*. 2nd ed. Singapore: Southern-Western.
- Molaei, M., Ansari, R. & Teimuori, H. 2013. Analysing the Impact of Service Quality Dimensions on Customer Satisfaction and Loyalty in the Banking Sector of Iran. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 3(3), 5-13.
- Mouton, J. & Marais, H.C. 1990. *Basic concepts in the methodology of the social sciences*. Pretoria, South Africa: HSRC Publishers.
- Mouton, J. 2001. *How to succeed in your master's and doctoral studies: A South African guide and resource book*. Pretoria: Van Schaik.
- Msoa, S.K. & Govender, J.P. 2015. Exploring the Relationship Between Service Quality and Customer Satisfaction in Postal Financial Services. *Risk Governance & Control: Financial Markets & Institution*, 5(3), 186-193.
- Munusamy, J., Chelliah, S. & Mun, H.W. 2010. Service Quality Delivery and its Impact on Customer Satisfaction in the Banking Sector in Malaysia. *International Journal of Innovation and Technology*, 1(4), 398-404.

- Neuman, V.L. 2011. *Social research methods: Qualitative and quantitative approaches*. 7th ed. Boston: Pearson.
- O'Neill, M.A. & Palmer, A. 2003. An Exploratory Study of the Effects of Experience on Consumer Perceptions of the Service Quality Construct. *Managing Service Quality*, 13(3), 187-196.
- Oliver, R. 1997. *Satisfaction: A behavioral perspective of the consumer*. New York: McGraw-Hill.
- Olorunniwo, F., Hsu, K. & Udo, G. 2006. Service Quality, Customer Satisfaction, and Behavioral Intentions in the Service Factory. *Journal of Services Marketing*, 20(1), 52-72.
- Ongori, J.K., Iravo, M. & Munene, C.E. 2013. Factors Affecting Performance of Hotels and Restaurants in Kenya. A Case of Kisii County. *Interdisciplinary Journal of Contemporary Research in Business*, 4(12), 897-928.
- OECD. 2015. Corporate governance: State owned enterprises. *South African Policy Brief*
- Palmer, A. 2008. *Principles of service marketing*. London: McGraw-Hill.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1991. Understanding Customer Expectations of Service. *Sloan Management Review*, 32(3), 39-48
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A., 1993. More on improving service quality measurement. *Journal of retailing*, 69(1), pp.140-147.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perception of Service Quality. *Journal of Retailing*, 64(1), 12-40.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1985. A Conceptual Model of Service Quality and its Implications for Future Research. *The Journal of Marketing*, 49(4), 41-50.
- Patel, P.2009. Introduction to quantitative methods. *Empirical Law seminar* (pp. 1-14), October 15.
- Perez, M.S., Abad, J.C., Carrillo, G.M. & Fernandez, R. 2007. Effects of service Quality Dimensions on Behavioural Purchase Intentions: A Study in Public-Sector Transport. *Managing Service Quality*, 17(2), 134-151.

Ports Regulators of South Africa. 2015. *SA port terminals: Capacity and utilisation review*. [Online]. Retrieved June 21, 2017: file:///C:/Users/Pavilion/Desktop/ZEKO/South-African-Port-Capacity-and-Utilisation-2014-15.pdf.

Prosavac, E. & Carey, R. 1989. *Program evaluation: Methods and case studies*. 3rd ed. Englewood Cliffs, NJ: Prentice Hall.

Ramsaran-Fowdar, R. 2008. The Relative Importance of Service Dimensions in a Healthcare Setting. *International Journal of Healthcare Quality Assurance*, 21(1), 104-124.

Salkind, N. 2010. *Statistics for people who (think they) hate statistics*. 2nd ed. Los Angeles: Sage Publication.

Saunders, M., Lewis, P. & Thornhill, A. 2009. *Research methods for business students*. 5th ed. Cape Town: Prentice Hall.

Sheth, J. & Mittal, B. 2004. *Customer behavior: A managerial perspective*. 2nd ed. Canada: Thomson South-Western.

Sheth, J., Sisodia, R.S. & Sharma, A. 2000. The Antecedents and Consequences of Customer-Centric Marketing. *Journal of the Academy of Marketing Science*, 28, Winter, 55-66.

Siddiqi, K.O. 2011. Interrelations Between Service Quality Attributes, Customer Satisfaction and Customer Loyalty in the Retail Banking Sector in Bangladesh. *International Journal of Business and Management*, 6(3), 12-36.

Somekh, B. & Lewin, C. 2005. *Research methods in social science*. London: SAGE.

Summers, D.C.S. 2010. *Quality*. 5th ed. Boston: Prentice Hall.

Svensson, G. 2004. Interactive Service Quality in Service Encounters: Empirical Illustration and Models. *Managing Service Quality*, 14(6), 278-287.

Swartzlander, A. 2004. *Serving internal and external customers*. London: Pearson Prentice-Hall.

Tavakol, M. & Dennick, R. 2011. Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, 2, 53-55.

Theron, D., Bothma, C. & Du Toit, M. 2004. *Focusing on customer service in Southern Africa*. Pretoria: Prince Publishers.

Thomas, A. 2012. Governance at South African state-owned enterprises: what do annual reports and the print media tell us?. *Social Responsibility Journal*, 8 (4): 448-470

Tiku, S. & Petch, M. 2010. Validation of Reliability Capability Evaluation Model Using Quantitative Assessment Process. *International Journal of Quality and Reliability*, 27(8), 938-952.

Timm, P.R. 2011. *Customer service: Career success through customer loyalty*. 5th ed. New Jersey: Pearson.

Transnet. 2017. *The roots of Transnet can be traced back to humble beginnings in the late 1850s*. [Online]. Retrieved March 20, 2017: <https://www.transnet.net/AboutUs/Pages/History.aspx>.

Transnet. 2014. *Corporate brochure*. [Online]. Retrieved February 12, 2017: <http://www.transnetportterminals.net/Media/Other%20Documents/Corporate%20Brochure%202014.pdf>.

Van der Wal, R.W., Pampallis, A. & Bond, C. 2002. Service Quality in a Telecommunications Company: A South African Experience. *Managing Service Quality*, 12(5), 323-335.

Van Haaften, R. 2010, 7 August. *Customer satisfaction survey on a monthly basis*. [Online]. Retrieved April 12, 2017: http://www.vanhaaften.nl/index.php?option=com_content&view=category-&id=54&Itemid=72&lang=en.

Van Ravesteyn, L.J. 2005. *The effect of relationship banking on customer loyalty in the retail business banking industry*. Master's degree in business leadership dissertation. Pretoria, South Africa: University of South Africa.

Vibha, A., Ravichandran, N. & Jain N.K. 2011. Dimensionality of Service Quality and Its Critical Predictors to Customer Satisfaction in Indian Retail Banking. *Advances in Management*, 4(10), 20-25.

Walliman, N. 2011. *Your research project: Designing and planning your work*. 3rd ed. Los Angeles, CA: Sage.

Walsh, G., Groth, M. & Wiedmann, K.P. 2005. An Examination of Consumers' Motives to Switch Energy Suppliers. *Journal of Marketing Management*, 21(special issue), 421-440.

Welman, J.C., Kruger, S.J. & Mitchell, B. 2005. *Research methodology*. 3rd ed. Cape Town: Oxford University Press.

Wiersma, W. & Jurs, S. 2005. *Research methods in education: An introduction*. 8th ed. Boston: Allyn and Bacon.

Wilson, A., Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2012. *Services marketing: integrating customer focus across the firm*. 2nd euro ed. Berkshire: McGraw-Hill.

Wirtz, V., Chew, P. & Lovelock, C. 2012. *Essentials of services marketing*. 2nd ed. Jurong: Pearson.

Woo, K. & Ennew, C.T. 2005. Measuring Business to Business Professional Service Quality and Its Consequences. *Journal of Business Research*, 58, 1178-1185.

Yadav, M.K & Rai, A.K. 2015. Exploring the Relational Impact of Service Quality on Customer Satisfaction. *Journal of Business Management*, 14(4), 17-31.

Yeo, R.K. 2008. Brewing Service Quality in Higher Education. *Quality Assurance in Education*, 6(3), 266-286.

Yin, R.K. 2003. *Case study research: Design and methods*. 3rd ed. Thousand Oaks, CS: Sage.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2013. *Services marketing: Integrating customer focus across the firm*. 6th ed. New York: McGraw-Hill.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2006. *Services marketing: Integrating customer focus across the firm*. 4th ed. New York: McGraw-Hill.

Zhao, X., Bai, C. & Hui, Y.V. 2002. An Empirical Assessment and Application of Servqual in a Mainland Chinese Department Store. *Total Quality Management*, 13(2), 241-254.

**ANNEXURE 1:
LETTER OF INFORMATION**



Title of the Research Study: Customer perceptions of service delivery: a case study at a South African Container Terminal.

Dear participant,

I am currently undertaking a research project as part of my studies towards a Master's Degree in Technology: Business Administration. The aim of the research is to understand customers' perceptions of service delivery and investigate customers' experiences of services rendered at a South African Container Terminal.

Would you agree to be interviewed for the study? The interview will take approximately 25 minutes. Participation is voluntary and you are free to withdraw from the study at any time without giving reasons and without prejudice or any adverse consequences.

The information you give will only be used for research purposes, and your identity and individual answers will be kept totally confidential. Should you wish to discuss this further please feel free to contact me or my supervisor (Dr M. Noor Davids, telephone 021 680 1525 or davidsNo@cput.ac.za).

Your assistance will be much appreciated,
Yours faithfully,

N. Cele
083 598 8889
zekocele@yahoo.com

.....

ANNEXURE 2:
LETTER OF PERMISSION TO CONDUCT RESEARCH



Title of study: **Customer perceptions of service delivery: A case study at a South African Container Terminal.**

Dear Human Resource Manager,

My name is Ntomb'zenhlanzeko Cele, I am currently undertaking a research project as part of my studies towards a Masters' degree in Technology: Public Management & Economics. The aim of the research is to understand customers' perceptions of service delivery and investigate customers' experiences of services rendered at a South African Container Terminal.

Truck drivers and Managers of selected transporters will form the sample of the study. Drivers will be given questionnaires to answer and the Managers will be interviewed by the researcher. The findings will be analysed and recommendations will be made where necessary.

I would like written permission to undertake the research project at this Terminal. The research project will not interfere with my work as it will be conducted outside working hours. Should you wish to discuss this further please feel free to contact me or my supervisor (Dr M. Noor Davids, telephone 021 680 1525 or davidsNo@cput.ac.za).

Your assistance will be much appreciated.

Yours faithfully
N. Cele

.....
083 598 889
zekocele@yahoo.com

**ANNEXURE 3:
INTERVIEW QUESTIONNAIRE (QUALITATIVE STUDY)**



INTERVIEW QUESTIONS:

1. How efficiently are your queries resolved?
2. How satisfied are you with your trucks turnaround time?
3. What challenges do you often come across when transacting at the Container Terminal?
4. What would you say is the level of service quality at the Container Terminal?
5. Would you say the Container Terminal lives up to the promises made to you, the customer?
6. What would you change about the quality of service received at the Container Terminal?

**ANNEXURE 4:
THE SERVQUAL QUESTIONNAIRE**

QUESTIONNAIRE

SERVICE QUALITY AT A CONTAINER TERMINAL

My name is Ntomb'zenhlanzeko kaMashimane Cele from the Durban University of Technology and I am conducting research for my master's degree. The title of my research project is Customer Perceptions of service delivery at a Container Terminal. In order to collect representative data, I would like you to answer this questionnaire. I only need 15 minutes of your time to complete the following questionnaire

Researcher Contact Details Supervisor Contact Details	Ms. Ntomb'zenhlanzeko kaMashimane Cele zekocele@yahoo.com Dr. Noor Davids 0846466668
--	---

Please cross **X** or tick **✓** one block for each question

1. Please specify your gender.	Male	Female
---------------------------------------	-------------	---------------

2. Please indicate your age category.	Below 24	25 – 34	35 – 44	45 – 54	55 and above
--	-----------------	----------------	----------------	----------------	---------------------

3. What is your highest educational qualification?	Less than Matric	Matric	Diploma	Degree	Other
---	-------------------------	---------------	----------------	---------------	--------------

4. How frequently do you visit the terminal?	Less than a week	Once a week	More than once a week
---	-------------------------	--------------------	------------------------------

5. Which is your most regular transaction?	Import	Export
---	---------------	---------------

KEY

1 = S D (Strongly Disagree)

2 = D (Disagree)

3 = A (Agree)

4 = S A (Strongly Agree)

			Rate your perceived level of customer satisfaction				Rate actual level of customer satisfaction received			
			S D	D	A	S A	S D	D	A	S A
Tangibles	1	The computer system used is fast and easy to understand.	1	2	3	4	1	2	3	4
	2	I experience easy process flow when I visit the Terminal.	1	2	3	4	1	2	3	4
	3	The physical layout of the Terminal is convenient and it reduces delays.	1	2	3	4	1	2	3	4
Empathy	1	Employees are responsive to my questions and complaints.	1	2	3	4	1	2	3	4
	2	I am treated with respect on arrival at the Terminal.	1	2	3	4	1	2	3	4
	3	Employees are caring and make me feel like a valued customer.	1	2	3	4	1	2	3	4
Responsiveness	1	Employees are willing to help and follow up on my problem until it is resolved.	1	2	3	4	1	2	3	4
	2	Important information is always shared with me on time.	1	2	3	4	1	2	3	4
	3	There are always enough machines to service us drivers no matter how busy it is.	1	2	3	4	1	2	3	4
Assurance	1	I feel safe and secure when in the Terminal.	1	2	3	4	1	2	3	4
	2	Employees are professional and knowledgeable when assisting me.	1	2	3	4	1	2	3	4
	3	I always feel confident I will get assistance if there is a problem.	1	2	3	4	1	2	3	4
Reliability	1	I experience quick turnaround time when in the yard.	1	2	3	4	1	2	3	4
	2	The Terminal consistently delivers on promised outputs.	1	2	3	4	1	2	3	4
	3	The Terminal is reliable in meeting operational targets which reduces container dwell time.	1	2	3	4	1	2	3	4
Is there anything else you would like to add not mentioned above?										

ANNEXURE 5: APPROVAL TO CONDUCT RESEARCH-GATEKEEPERS LETTER



23 March 2016

Dear Ntomb'zenhlanzeko Cele,

Re: Request to undertake research study at this Terminal

Permission is hereby granted for you to conduct research about (TPT) Terminals . As an employee of Transnet Port Terminals, you have my full support should you require any assistance.

I will appreciate you sharing your findings once you have concluded your study. I believe your Research subject will greatly benefit the Terminal in delivering freight reliability and improve our Operational efficiencies to all customers

I wish you all the best for your assignment.

Kind Regards



Qamisa Tukani
Chief Planning Manager
Durban Container Terminal
(031)3616883

A division of
Transnet SOC Ltd
Registration Number: 1990/000900/30

Kingsmead Office Park
Stalwart Simelane Street
Durban 4001

PO Box 10124
Marine Parade, Durban
South Africa 4056

www.transnetportterminals.net
Tel +27 31 308 8333

Directors: LC Mabaso (Chairperson) SI Gama* (Group Chief Executive) Y Forbes GJ Mahlalela PEB Mathekga ZA Nagdee VM Nkonyane BG Stagman
GJ Pita* (Chief Financial Officer)
*Executive

www.transnet.net

Group Company Secretary: NE Khumalo

ANNEXURE 6: EDITING CERTIFICATE

PROOF OF EDITING CERTIFICATE

TO WHOM IT MAY CONCERN

Language editing

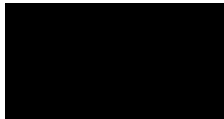
I, Jeanne Enslin, acknowledge that I did the language editing of **Ntomb'zenhlanzeko Cele's (Zeko)** dissertation submitted in fulfilment of the requirements for the degree of Master of Management Sciences.

The title of the dissertation is:

Customer Perceptions of Service Delivery: A Case Study at Transnet Port Terminal, Pier 2.

If any significant text changes are made to the electronic document that I sent to Zeko Cele on 23 October 2017, I cannot be held responsible for any errors that are made. Alternatively, the document needs to be returned to me to check the language of the changes.

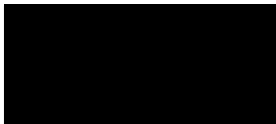
Detailed feedback of all the language editing done has been provided to Zeko in writing and is evident in the dissertation in track changes and with comments. The quality of the final document, in terms of language, formatting and references, remains the student's responsibility.



Jeanne Enslin
Language editor
082-6961224.

Technical editing

I, Ronel Gallie, acknowledge that I did all aspects of the technical formatting and organising of the reference list of **Ntomb'zenhlanzeko Cele's** dissertation submitted in fulfilment of the requirements for the degree of Master in Management Sciences. Detailed feedback about the work done has been provided to Zeko.



Ronèl Gallie
Technical editor
084 7780 292

J H Enslin BA (US); STD (US); Hons Translation Studies (UNISA)