# UNIVERSITY OF KWAZULU-NATAL

# A critical analysis of quality management systems: A logistics perspective

By

# Nontsikelelo Mdiniso

# 213573223

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School of Management, IT and Governance College of Law and Management Studies

**Supervisor: Dr Roger Hans Salisbury** 

#### **DECLARATION**

#### I Nontsikelelo Mdiniso declare that

- (i) The research reported in this dissertation/thesis, except where otherwise indicated, is my original research.
- (ii) This dissertation/thesis has not been submitted for any degree or examination at any other university.
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# **DEDICATION**

First and foremost, I dedicate this project to God who gave me the strength to achieve the necessary throughout this journey.

I dedicate this study to my life partner Ayanda Brian Ngcobo, my mother Lungile Zuma and my father Tyrone Mdiniso. I also dedicate it to my brother and sisters, and all my family and friends for the love and support and prayers throughout this project.

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#### **ABSTRACT**

The management of quality in any organisation is critical to its success. The premise on which any organisation is built, is to satisfy the needs of its customers. Regardless of whether the organisation's offering product is a product or a service, the former remains true. No matter the industry or the sector, organisations need to ensure they meet these needs.

The management of quality in an organisation is difficult to measure, and it is for this reason, that organisations introduce Quality Management Systems. Organisations then need to determine what customers consider quality to be, and more importantly how they can measure quality.

The aim of this study was to uncover the dimensions customers use to measure quality management. The theoretical framework used was the SERVQUAL model, which assumes the customer measures quality using five dimensions. These dimensions formed the basis of and influenced the development of the two data collection instruments used to determine whether Company A's management of quality met the expectations of their customers. Therefore, the aim of the study was to determine whether Company A, in the transport and logistics industry in KwaZulu-Natal Province of South Africa, was aware of its customer needs and to establish whether the organisation's usual method of managing quality was sufficient.

Part of the aim of this study included determining customer perceptions of quality based on the five dimensions presented to them. The data was collected from a sample that included both customers and employees of Company A using survey questionnaires and semi-structured interviews, analysed using Gap analysis.

The study showed areas where the employees' and the customers' perceptions of quality were similar or differed and provided clarity as to where the organisation should focus its improvements. The gaps identified can assist the company in reaching the level of quality expected by customers, and ultimately to exceed these expectations. The study also revealed that only certain dimensions contained these gaps and this meant that Company A could implement a targeted strategy aimed at improving their service quality.

The recommendations generated from the results of this study provide insight into how managers of Company A can improve quality management and service quality in the organisation, which will ultimately lead to greater company success.

**Key words:** Quality management systems, SERVQUAL, transport, logistics, quality perceptions, service quality, reliability, responsiveness, empathy, tangibility.

# **ACRONYMS AND ABBREVIATIONS**

CF Customer Focus

CI Continuous Improvement

CRM Customer Relationship Management

HRM Human Resource Management

LSP Logistics Service Providers

QMP Quality Management Planning

QP Quality Planning

PM Process Management

SERVPERF Service Performance

SERVQUAL Service Quality

SM Supplier Management

SMMEs Small, Medium and Micro Enterprises

TQM Total Quality Management

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#### **CHAPTER ONE:**

### INTRODUCTION AND BACKGROUND OF THE STUDY

#### 1.1. Introduction

Challenges can always be found in the aspects of quality management within any organisation (Ara & Zargar 2018). Establishing a connection between customers' expectations and what the company is providing in relation to quality is critical to the success of any organisation (Dale, Bamford, Bamford & Wiele 2016).

The way in which an organisation ensures the maintenance of quality through different systems and procedures is critical to its success. Whether an organisation is using the International Organization for Standardization (ISO) 9000 Quality Management System (QMS) (Musanzikwa & Ramchander 2018), or they have established their own QMS, it is critical for them to determine how their customers measure service quality. Establishing whether there is a gap between customer expectations and the actual service delivery of the organisation can improve organisational performance and in turn assist in guiding improvements that will improve customer loyalty (Aydinli & Senyurek, 2016).

This chapter provides a detailed summary of the research and include a background of the research. This chapter will also allude to the research objectives, problem statement and research questions. The contribution the study makes to the body of knowledge will also be presented here. The limitations to the study are also indicated in this chapter. A summary of all chapters in the study will be included, to indicate how the study is broken down.

# 1.2. Company Background

Company A is a black-owned logistics company based in Pietermaritzburg, the capital city of the KwaZulu-Natal Province. The company officially registered in the year 2002 and is named after its founder and owner. The company is 100% black-owned with female ownership making up 50%. The owners are extensively involved in the management of the organisation.

Company A provides freight services for numerous companies that are well-known in the Pietermaritzburg and surrounding areas. The company employs over forty staff members, and the personnel are equipped to provide the best customer service.

Company A focuses on ensuring high safety standards to clients and employees alike and comply with all standards relevant to their industry. Company A focuses on ensuring a tailor-made service for its customers, and work at remaining in business as a SMME. With over 17 years of industry experience, Company A hopes that their ability to deliver reliable and affordable transport solutions will be the key to staying in business for years to come.

### 1.3. Research Problem

The correlation between customer satisfaction and service quality is one that is complicated. Determining what customers consider service quality is critical for an organisation to ensure that they are delivering precisely what the customer wants. The employees that are involved in delivering service quality must be made aware of customers' expectations. An organisation's QMS must be built around the various expectations in order to ensure that the customers' needs are met – and ultimately, that customer satisfaction is reached. The logistics industry was recognised by Company A as becoming a saturated industry, and with that management identified the need to add value to their current offering. In an era when service providers need to offer considerable value, determining customers perception of quality was critical for Company A. The goal of using the SERVQUAL model was to determine where they could improve their services and ultimately gain competitiveness in new and existing markets. Without the competitiveness, the organisation's success rate would be negatively impacted and ultimately the loss of market share would result. The implications of this could result in the closure of Company A, considering its already limited market share and the small size of the organisation.

In the past it has been determined that there are gaps between what the organisation provides and what the customer expects (Pradana, Wahyuddin, Syarifuddin & Putra, 2019). Therefore, the researcher seeks to determine what customers use to measure service quality. The study will also determine what the customers' perceptions of service quality are. Using the SERVQUAL model, the researcher will determine which dimensions which customers use to measure service quality.

# 1.4. Research Questions

The main research question on which this study is based is: What are the gaps between the selected transport and logistics industry-based organisation's QMS and the customer perceptions of service quality?

The research sub-questions that shape the premise of this study are as follows:

- 1. How does reliability influence the perception of service quality?
- 2. Does responsiveness influence the perception of service quality?
- 3. To what extent does assurance influence the perception of service quality?
- 4. Does empathy influence the perception of service quality?
- 5. Do tangibles influence the perceptions of service quality?

# 1.5. Research Objectives

The following objectives are set to guide the research:

- 1. To determine how reliability influences the perception of service quality.
- 2. To ascertain whether responsiveness influences the perception of service quality.
- 3. To determine the extent to which assurance influences the perception of service quality.
- 4. To establish the role empathy plays in influencing the perception of service quality.
- 5. To determine whether tangibles influence the perceptions of service quality

# 1.6. Contribution of the Study

Over the years, customer perception of quality has evolved (Walker, 2006). Organisations must accurately identify the dimensions their customers use to measure service quality (Cronin Jr & Taylor, 1994a). This study will assist Company A in identifying their customers' perspective of service quality, and how they can ensure that the QMS used is aligned accordingly (Patat & Jayaprakash, 2018). Additionally, management can develop strategies to close the gap between customers' expectations and the actual delivery of quality service (Brown & Swartz, 1989). Finally, the study will expand the knowledge base on how customers perceive quality and the dimensions customers use to measure quality.

Comparatively little research in QMS related to the logistics industry has been conducted. In addition, little research can be found on the gaps in quality measurement dimensions and their effects on customer satisfaction and organisational performance in this industry. Some research that refers to greening logistics (Navarro, Cronemyr & Huge-Brodin 2018), competitiveness in logistics (Šimek & Cempírek 2021) and quality management in logistics (Lai, Lau & Cheng 2004a), however the is not enough done in this regard.

# 1.7. Importance and Benefits of this Study

This study aims to identify the gaps between the selected organisation's quality standards and customers' expectations of service quality. Quality managers within the transport and logistics industry are responsible for assuring service quality throughout the supply chain. Relatively little research in QMS related to the logistics industry has been conducted. In addition, little research can be found on the gaps in quality measurement dimensions and their effects on customer satisfaction and organisational performance in this industry.

The theoretical framework used in this study is the SERVQUAL model (Parasuraman, Zeithaml & Berry, 1985). This model provides the five dimensions that a customer uses to measure service quality. This model elaborates on the dimensions and how customers weigh these differently, according to their individual expectations. Closing the gap between customer expectations and their perceptions of the encountered service is imperative for customer contentedness (Baki, Sahin Basfirinci, Murat, & Cilingir, 2009). Establishing customer perceptions will assist organisations to pin-point and focus on the dimensions that will increase customer satisfaction. This is important as customer satisfaction has been shown to have a direct impact on the performance of an organisation (Naik, Gantasala & Prabhakar, 2010).

The benefits of this study are that by identifying the gaps, quality managers can minimise these weaknesses and improve customer relationships as well as supply-chain performance, efficiency and quality, bearing in mind its dynamic nature. The findings of this study may contribute to the body of knowledge and provide new insight into the field.

# 1.8. Limitations of the Study

Given that the sample was made up of the employees and customers of Company A, it was easier to obtain a list of potential participants from the company than it was to obtain their

feedback. Numerous customers did not appear interested in participating in the survey, as they

did not complete and return the questionnaire.

As the study target population was made up of customers of a SMME, the sample was limited.

The Covid-19 pandemic had an effect on the intended method of data collection for employees,

which was meant to be face-to-face interviews. These had to be done telephonically instead.

Probing the employees was difficult and contacting all the employees was also difficult, as they

had the freedom to ignore the calls and were impatient over the phone. Most respondents did

not agree to virtual sessions, and wanted to remain anonymous, only providing their

designations. Gaining access to the quality management documents which was previously

agreed to, was on the condition that the researcher would access these on site, but again Covid-

19 protocols prohibited the researcher from this. This prevented an aspect of triangulation

which had been planned, through circumstances beyond the researcher's control.

1.9. Summary Outline of Chapters

Chapter One: Introduction and Overview

Chapter One provides a summary of the study. The background of the research, research

objectives, problem statement, research questions and the contribution of the study are

presented. In addition, the limitations of the study and the chapter summaries are also included.

Chapter Two: Literature Review

This chapter reviews literature that is related to QMSs with special emphasis on the theoretical

framework underpinning this study. The dimensions that are outlined in the SERVQUAL

model form a significant part of the detailed discussion in this chapter.

Chapter Three: Research Methodology

In Chapter Three, the research methodology used to guide the researcher in their collection of

data, is presented. The chapter includes insights into the research design, research approaches,

the sampling methods, the various data collection methods and other elements pertaining to the

research methodology.

Chapter Four: Presentation of Results

The main focus of this chapter is on the presentation of the results, and interpretation based on

the dimensions outlined in the SERVQUAL model. The results of the findings inform the

discussion that takes place in the chapter that follows.

5

Chapter Five: Discussion of Results

In this chapter, the interpretation of the data collected in this study is discussed, in line with the research objectives. These objectives form the basis of the discussion; the data from the customers and the employees were compared to determine any gaps in their perceptions of service quality. These assisted the researcher to determine the recommendations made to Company A and also those for further study.

# 1.10. Chapter Summary

This chapter has provided insights into how, where and why the study was conducted and the tools that were employed. The next chapter will provide a literature review on the theoretical aspects of this research with a special focus on service quality as perceived by the customers.

#### **CHAPTER TWO:**

#### LITERATURE REVIEW

#### 2.1. Introduction

The literature review is an evaluation report of published studies found in the body of knowledge linked to a selected topic (Tunku & Rahman, 2019; Mohammad, Adel, Amirian & Ghaderi, 2015). The primary purpose of a literature review is to contextualise the research, to summarise, to describe, to justify the research problem, to illustrate how the subject has been studied before, and to highlight any gaps (Sharma, Garg & Agarwal, 2012). The chapter focuses on reviewing the literature on Quality Management Systems (QMSs), globally.

All around the world, organisations are investigating better ways of conducting business. The idea across organisations is for them to run in the most efficient and effective way. Although quality management was once considered solely a manufacturing aspect of concern, it has now become a focal point for most organisations. In a time where customers have increased expectations, organisations need to constantly seek to improve quality of service.

This chapter focuses particularly on the SERVQUAL dimensions used by customers to perceive service quality. It highlights the importance of service quality and provides empirical evidence that justifies the use of the framework selected for this study as well as delineates the knowledge gaps in the literature.

# 2.2. Quality Management – A Review

Although the determinants of quality may be undefined, its importance to organisations and customers is undeniable (Tunku & Rahman, 2019). The term quality management means to organise, manage and direct activities and tasks required to maintain a desired level of excellence. Furthermore, a QMS refers to the enrolment of activities or tasks in an attempt to continuously control and guide the company in a way that improves overall efficiency and efficacy (Masadeh, 2018).

Some evidence indicates that QMSs contribute positively towards the competitiveness of an organisation (Garza-Reyes, 2018). Other studies that ascertain the positive impact of QMSs in the organisation include one by Shengeza (2017) who found a link between organisational excellence can be achieved through the management of people, processes, and documentation, also known as Quality Management System (QMS). While Nguyen, Phan and& Matsui (2018)

found that quality management practices have a notable contribution to positive sustainability performance within the organisation. Managers use these systems to measure the quality of their services in order to ensure that excellent levels are met with every activity or task performed. The term QMS can be defined as the integrated approach to planning and deploying quality management models, methods and tools throughout the organisation and aligning them to the entire business strategy (Garza-Reyes, 2018).

Quality management is the core of any organisation. Cheng and Choy (2013) and Rong, Kowang, Hee, Fei and Yew (2019) define quality management as being the continuous improvement of organisational functions through the participation of organisational members, while Sabbagha, Rahman, Ismail and Hussain (2016) define quality management as a way to organise, to involve all components of the organisation to achieve quality requirements to meet both customer and employee satisfaction. In support of this, Masadeh (2018) indicates that the term quality management means to organise, manage and direct activities and tasks required to maintain a desired level of excellence. The management of quality can be improved through the development and implementation of a QMS for employees within an organisation to use, in ensuring high quality goods or services are delivered to the customer.

In the past, the logistics industry focused on providing time and place utility using the 7Rs (Goh, 2015). Organisations need to ensure that they have the right product, at the right place, at the right time, in the right price, for the right customer, in the right quantity (Teoman, 2020). Over the years, there has been an increase in what customers expect of quality from organisations, particularly in the logistics industry (Ismyrlis 2017). Despite the existing evidence that states the importance of quality management and its ability to improve organisational performance, its importance is yet to be fully realised in the logistics industry (Rucha, Gichira, Wanjau & Njihia, 2017).

Organisations within this specific sector have had to investigate providing more than just the functional benefits to their customers and have had to consider the "marketing" side of service quality. In order for an organisation to impact and retain its customers, the gap between customer expectations and the perceptions of delivered services should be eliminated. The implementation of an effective QMS will ensure continuous improvement of the quality of the service by participation of all members within an organisation. Quality management impacts the organisation's performance at both a financial and operational level, while improving customer satisfaction (Rong et al., 2019).

Quality plays an important role in the competitiveness of an organisation as well as in attracting and retaining loyal customers. Customer perceptions of quality are relevant to both business-to-business and business-to-consumer organisations. Studies in India indicated that although the adoption of Quality Management Practices (QMP) were delayed, 90% of the organisations had a positive attitude towards QMP (Aveling, Martin, Armstrong, Banerjee & Dixon-Woods, 2012). Globally, the importance of ensuring service quality through the implementation of QMPs has become increasingly clear, resulting in their increased adoption in many organisations over the years (Bagur-Femenías, Perramon & Oliveras-Villanueva, 2019).

# 2.2.1. The History of Quality Management

It is important to elaborate on the aspects surrounding quality. There are different ways to manage quality within an organisation, all of which contribute to the improvement of service quality. The direct impact of quality management on the organisation's performance is a positive one. A critical success factor lies in the commitment of managers and top management alike (Randhawa & Ahuja, 2017).

# **2.2.2. Quality**

The concept of quality was first introduced to Japanese industrial leaders after World War II by quality gurus such as Deming, Joseph Juran Goetsch and Davis (Maguad, 2006). Ayandibu and Houghton (2017) define quality as a determinant of customer loyalty and satisfaction while Goetsch and Davis (2014) define it as a fitness for purpose and in the process highlight the difficulty in defining quality when applied to a service as opposed to a tangible product.

Quality does not just relate to the final product or the service, it exists in all aspects of an organisation (du Toit, Hughes, Mason & Tousignant, 2011). The sole purpose of an organisation is to ensure that the final product or service is of high quality, thus the best way to ensure this is by addressing quality levels in every aspect of the organisation (Anil & Satish, 2019; Yap & Kew, 2007). In its essence, quality will assist an organisation in achieving customer satisfaction, resulting in repeat or loyal customers (Hokoma, Khan & Hussain, 2010).

# 2.3. Total Quality Management

Total Quality Management (TQM) is the managing of processes within an organisation to ensure customer satisfaction (du Toit, 2011). Processes within an organisation should be designed to meet customer needs and improve levels of customer satisfaction (Yap & Kew,

2007). The normal procedures will likely be revisited by an organisation, in order to guarantee customer satisfaction. The notion of continuous improvement forms the basis of TQM (Czajkowska & Stasiak-Betlejewska, 2015; Al-Omari & Adaileh 2018), and remains an ongoing process throughout the supply chain. Total quality management is thus a way to improve quality performance within an organisation (Saleh et al. 2018). Deadrick and Gardner (1999) argue that the most relevant criterion in performance management is, in fact, quality. This explains the amount of focus which is placed on this aspect.

The above style of quality management underpins the successful management of an organisation. In the history of quality management in organisations, quality systems and TQM are found in numerous forms of academic literature (Chaudhry, Awan, Bilal & Ali, 2018).

# 2.4. An Overview of a Quality Management System

The development of a QMS establishes standard procedures and processes and provides structure within an organisation (Nenadál, 2016). This system is used to integrate all procedures, which allow for the desired excellence an organisation aims to achieve. The QMS thus enables activities and resources within the organisation to be directed in a way that ensures service quality is achieved (Kalyta & Mintser, 2015).

A QMS is one of the two pillars that enables an organisation to remain effective (Barata, 2017). In a study conducted in Russia, the outcome suggested that the most important reason that managers implement QMS is that quality is seen as core to the company (Lukichev & Romanovich, 2016). This study was conducted in the construction industry and determined that the certification of the QMS systems is not as critical as the actual system is itself – which underpins the organisation (Lukichev & Romanovich, 2016). ŁUczak & Wolniak (2016), in his analysis based on various industrial properties in Turkey, argued that the adoption of QMSs in Turkey has led to an increase in national innovation which may continue. However, Wagner, Gulácsi, Takacs and Outinen (2006) conducted a study in The Netherlands, Finland and Hungary to compare the implementation of QMSs in hospitals and the results showed that 4%, 3% and 0% of hospitals in The Netherlands, Finland and Hungary had implemented a QMS, respectively (Baṣaran, 2016).

# 2.5. An Overview of Quality Initiatives

The operations-based definition of quality in the logistics industry has completely evolved over the years, and now focuses on quality, further addressing the perceptions of actual and potential customers (Alkahtani & Kaid 2018).

(Saleh et al. 2018) argue that the need for QMSs has increased, and they provide a ten-step approach to its implementation. The first of these steps is that management must 'buy into' the systems for them to be fully effective (Wang & Huynh, 2014) (Wang & Huynh, 2014). The idea of using a QMS is to ensure that all aspects of a business and its processes are aligned to meet customer expectations. (Kritz, 2015) suggests that the leadership and team building in an organisation must motivate employees within the organisation. Employee motivation is critical to ensuring that customer expectations are met, as motivated employees are likely to align service delivery with the expectations of customers (del Castillo-Peces, Mercado-Idoeta, Prado-Roman & del Castillo-Feito, 2018).

Figure 2.1, illustrates the 10-step approach to implementation of a QMS, with an explanation of each step provided.

# 2.5.1. Step 1: Management Commitment

This is one of the most vital steps of the QMS implementation process, with the failure of such implementation being possible should management not communicate their commitment. The vision for quality improvement should be a top-down approach and employees should see managers' commitment to the process in order to follow suit (Wijesekera & Fernando, 2016). This commitment should resonate throughout the entire organisation.

# 2.5.2. Step 2: Quality Improvement Team

The performance objectives are established once the vision for quality management is defined (Nguyen & Ninh, 2017). Here, top management will define exactly what is to be achieved by the QMS. Corresponding strategies are generated as a guide, leading to the achievement of these objectives (Maloni 2019). The quality improvement team is formed to achieve quality improvement objectives and is made up of individuals from different departments within the organisation (Sinha, Garg, Dhingra & Dhall, 2016). This team is responsible to design and develop and a QMS, and to identify the procedures and processes that should be included. The team is also responsible for benchmarking to industry standards relevant to quality; these

should feed into the system in a way that is aligned with relevant quality improvement strategies (Goh, 2015).

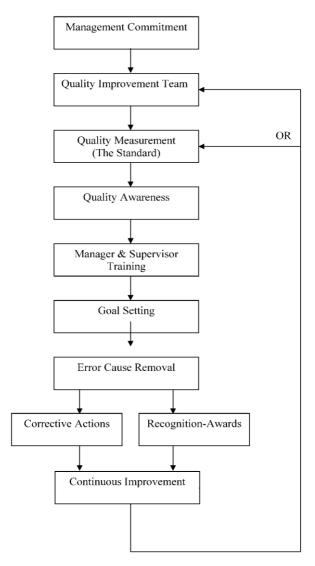


Figure 2.1: The 10-step approach to implementation of a Quality Management System (Lai, Lau & Cheng, 2004a)

# **2.5.3. Step 3: Quality Measurement (The Standard)**

The quality improvement team will identify the significant outputs that will result in customer satisfaction and develop critical performance characteristics (Martin & Thawabieh, 2018). These requirements are then included in the quality policy, while the quality measurements will show any issues that require corrective steps to be taken (Saleh et al., 2018). An evaluation of quality is conducted at each department level. This evaluation will assist the team in the documentation

of standards and procedures which will guide all employees in the organisation to achieve customer satisfaction through their different work processes (Maloni, 2019).

# 2.5.4. Step 4: Quality Awareness

This step ensures a distinct awareness of quality in the organisation, where every employee in the organisation is educated about the processes of quality management. Each employee is made aware of the role they play in the management of quality, and the importance of adhering to the guidelines provided by the QMS (Farinha, Lourenço & Caroço, 2016). The most valid objective of this step is to motivate employees to take personal responsibility and forge a commitment to achieving quality improvement and ultimately customer satisfaction (Maloni, 2019).

# 2.5.5. Step 5: Manager and Supervisor Training

Top management require training so as to carry out their respective functions and to achieve the objectives of the implementation of the QMS. The rationale behind this training is that managers and supervisors are made aware of the essentials required from the subordinates and will in turn educate their subordinates accordingly (Maloni, 2019). Training will ensure that all individuals within the organisation are aligned with the quality improvement guidelines that are implemented throughout the organisation (Saleh et al., 2018).

# 2.5.6. Step 6: Goal Setting

This step is taken to ensure that all goals are set as actions to be taken by each department and these improvement plans should be in line with the organisation's goal of achieving maximum improvement in quality. Wijesekera and& Fernando (2016) emphasise that all initiatives made in improving quality should result in a significant increase in customer satisfaction. This is only a guarantee when set goals are specific, measurable, attainable, realistic and have time frames attached (Maloni 2019).

# 2.5.7. Step 7: Error Cause Removal

In this step, employees are given a platform to express any challenges they may be facing in the implementation of the QMS. Management listens to the feedback provided by the employees, and they describe any difficulties encountered. The most important outcome of this step is for employees' awareness of the channels available to them through which to express their grievances, if need be (Habtoor, 2015). This is an important stage, as it allows employees to dialogue with management which assists in improving the quality of their work (Wijesekera & Fernando, 2016).

# 2.5.8. Step 8: Corrective Actions

To obtain an error-free logistics service requires an extensive amount of periodic preventative maintenance of all processes within the organisation. A proactive nature is required from all employees, particularly top management in order to achieve continuous improvement of the services. This particular step is responsible for providing an organised way of resolving, halting any preventing problems identified in the previous steps (Wijesekera & Fernando, 2016). The quality improvement team, formed in step 2, are responsible for identifying such problems in a proactive way. Identifying and anticipating problems is vital to their mitigation and to formulating solutions.

# 2.5.9. Step 9: Recognition and Reward

Staff satisfaction is as important as that of the customer (Kattara, Weheba & El-Said, 2008). An organisation's staff members should feel empowered in the process of implementing a QMS and ultimately feel motivated to get actively involved in the improvement of quality. How the staff members feel about the implementation of the QMS plays a crucial role in achieving set goals (Levine & Toffel, 2010). The ability of employees to enjoy the implementation process lies in their participation and in individual or group achievements being rewarded. This serves to improve the performance of the employees and promotes the development of a motivated and empowered work force (Wijesekera & Fernando, 2016).

# 2.5.10. Step 10: Continuous Improvement

It is critical for quality not only to be maintained but continuously improved. The emphasis on continuous improvement is that a non-stop action in any organisation will result in sustainable improvements (Chaudhry et al., 2018). The design of the QMS should be assessed and redesigned based on evolving market conditions. Quality knows no end, or limit and for this reason an organisation should strive for the "Kaizen" approach to their quality management processes (Wijesekera & Fernando, 2016).

# 2.5.11. Summary of 10-step Approach

Numerous steps in this approach speak to the empathetic dimension of perceptions of quality a customer will have when assessing the service quality of an organisation. The commitment of employees within the organisation would result from employee abilities to empathise with customer needs (Mehralian, Nazari, Nooriparto & Rasekh, 2017). This will result in consistency in the service delivered to customers which plays a vital role in customer satisfaction. The implementation of a QMS ensures that quality management practices are adhered to in an organisation and provide a guide for policies and processes within the business (Castello, de Castro & Marimon 2019).

The results of using a QMS can be determined from the organisational performance. If the impact of such a system is positive, the performance of an organisation will improve.

Using an industry specific model, Kersten and Koch (2010) measured service quality of the logistics industry and found that the effective management of quality could impact business success positively. This approach, however, would require support from results linked to the framework used in Kersten and Koch's (2010) study. Implementation of a QMS without determining customer expectations might be a fruitless exercise (Raza & Ali, 2015). Although impacting customer expectations is vital, implementation should focus on the organisation's employees rather than directly focus on customer expectations.

# 2.6. International Organization for Standardization

There is a difference in the way in which a QMS is implemented based on existing approaches and the way in which a QMS should be implemented under the guidelines of the International Organization for Standardization (ISO) 9000 frameworks (Hernandez, 2010). The framework provides criteria for a majority of organisations and results in customers trusting organisational quality if certified by this organisation (Chee Ming, Kathawala & Sawalha, 2015). The ISO was established in 1947 when representatives from 25 different countries met in London (International Organization for Standardization Central Secretariat, 1997). It consists of 163 members. The organisation was created to review applications for international standards and to conduct inspections, with the ultimate goal of ensuring that differences in standards are eliminated between countries, thereby improving international trade (Başaran, 2016).

Although an organisation may have ISO certification and adhere to guidelines provided by the abovementioned criteria and framework, this does not guarantee customer satisfaction or

loyalty. It can only improve possible positive consideration by customers, without addressing their perceptions of quality or taking these into consideration. Although the benefits of ISO 9001 can be listed as internal and external for the establishment such as culture change among staff, increasingly organised behaviour, improved efficiency of management, improved documentation, planned decreases in costs, and a rise in productivity (Başaran, 2016); Singh, Kumar and Singh (2018) state that conclusive evidence of the effectiveness of ISO 9001 QMS does not exist in literature.

The five dimensions of the ISO 9001 effectiveness are identified by Psomas and Antony (2015), with employee attributes, company attributes and company internal motivations considered to be the most significantly impacting. The identified dimensions should inform the parameters of the QMS relevant to the organisations in order to improve performance (Sweis et al., 2021).

# 2.7. Quality Management Practices

The literature has identified nine quality management practices, namely leadership, customer focus (CF), human resource management (HRM), quality planning (QP), process management (PM), supplier management (SM), quality tools and techniques, continuous improvement (CI) and product or service design (Khanuja & Jain, 2019). These are described briefly in the subsections that follow.

# 2.7.1. Leadership

Leadership in a company assesses the involvement of employees in setting, creating and sustaining the values, goals and performance of the company (Anil & K.P, 2019). According to Ferdousi, Baird, Munir & Su (2019) leadership has an influence on quality planning, customer focus, and human resource management.

### 2.7.2. Customer Focus

Customer focus describes how procedures are undertaken by companies to acquire information about current and future customers, as well as how companies put in place requirements that satisfy customers (Lee, Rho & Lee, 2003). According to Tari et al. (2007), customer focus has a direct influence on process management.

# 2.7.3. Human Resource Management

Singh et al. (2018) indicate that ISO 9000 accredited companies should ensure that employees in the company are trained accordingly and employees should be included in the development of quality plans and the formulation of policies, and should continuously improve their work output, thus improving the performance of the company. Human resource management thus has a direct influence on the performance of the company (Lee et al., 2003).

# 2.7.4. Quality Planning

The purpose of quality planning is to achieve persistent and consistent company excellence by integrating quality into the strategic plans of the company (Lee et al., 2003) and as Tari et al. (2007) highlighted, it is linked to continuous improvement.

# 2.7.5. Process Management

The purpose of process management is to evaluate how the company controls its services/products, and how the company manages the performance of suppliers (Neyestani & Juanzon, 2017). Tari et al. (2007) also indicated the strong relationship that exists between process management and continuous improvement.

# 2.7.6. Supply Management

The main purpose of supplier management is to choose suppliers that provide quality service products (Neyestani & Juanzon, 2017). The selection is done based on procedures that evaluate supplier association and coordination (Ristovska, Kozuharov & Petkovski, 2017).

### 2.7.7. Quality Tools and Techniques

Descriptive and statistical analyses are used as techniques to help employees to identify variations within process outputs and their sources, which will lead to improving performance or quality of a process/product (ElShaer & Shaker, 2020). These techniques can help to improve process management and continuous improvement (Khanuja & Jain, 2019).

### 2.7.8. Continuous Improvement

This particular model of improvement can be tracked all the way back to the 1880s (Peters, 2002). The foundation of this model is underpinned by a culture of innovation that allows organisations to focus on stakeholder requirements and emphasises the involvement of

employees (Kritz, 2015). In the midst of globalisation and competitiveness, companies are required to continuously improve the quality of their products as well as the practices by which these outputs are realised (Al-Refaie, Ghnaimat & Ko, 2011).

# 2.8. Total Quality Management

Developed in the United States of America in 1980, TQM resulted from the realisation by Americans that Asian countries were producing high quality products and thus possibly had superior systems which were subsequently investigated (Keli, 2015). Total quality management is considered a catalyst, resulting in its adoption by both commerce and industry (Keli, 2015).

(Khanuja and& Jain (2019) found that there is a positive relationship between the scope with which an organisation implements TQM and the organisation's performance. Gharakhani, Rahmati, Farrokhi and Farahmandian (2013) argue that TQM cannot succeed without commitment from top management, as does (Khanuja and& Jain (2019), proving the positive relationship between TQM and management leadership. According to (Keli (2015), four components often cited as vital to successful TQM are customer satisfaction, employee improvement, managerial leadership, and process improvement and control.

(Castello, de Castro & Marimon (2019) note that the critical success factors in the implementation of TQM are leadership, process management, service design, human resource management, customer focus, education and training, and supplier quality management. Meanwhile, their predecessors (Vranaki, Vranakis & Sarigiannidis (2015) argue that the critical success factors of TQM implementation include executive commitment, an open organisation, and employee empowerment. Arshida and Agil (2013) list critical success factors relevant to TQM implementation as top management commitment, education and training, supplier quality management, a vision and plan statement, employee empowerment, recognition and rewards and customer focus. Sadikoglu and Zehir (2010) identified TQM factors as being leadership, training, employee management, information and analysis, supplier management, process management, customer focus and continuous improvement. The critical success factors commonly found in the literature are thus employee empowerment, leadership, top management commitment and supplier quality management.

Anil & Satish (2019) elaborate on how TQM is particularly important for the survival of organisations in an era of globalisation and constant change. In agreement, Arumugam,

Mojtahedzadeh and Malarvizhi (2011) argue that organisations that possess the ability to compete in this era of globalisation, are those with the ability to deliver high quality goods and services. Without the ability to offer quality, an organisation will not survive globalisation and will fail to compete in a global market.

Total quality management and continuous improvement require commitment from every part of the organisation (Anil & Satish, 2016). Without this commitment, it is difficult to expect an organisation to successfully manage quality levels and ultimately satisfy the needs of the customer through the production of either a product or service (Musa, 2015).

# 2.9. Service Quality and Customer Satisfaction

In the past two decades, practitioners and researchers have been studying service quality (Raza & Ali, 2015). According to practitioners, service quality can increase the performance of an organisation (Beigi, Jorfi, Tajarrod & Beigi, 2016; Lee et al., 2007). Service quality and customer satisfaction are interchangeable terms, according to these practitioners.

Quality refers to something which is perceived to be good or not (Sutopo & Zubaidah, 2017). However, some are of the opinion that the quality of a service can be defined from the different expectations of users towards the services provided, along with their perception of the service received (Munusamy & Chelliah, 2011). Whilst customer satisfaction can be defined in many ways, it is often seen as the main factor in achieving organizational goals and has since become a baseline standard of performance (Munusamy & Chelliah, 2011).

The quality of service is crucial and as Choi et al. (2014) noted, the prerequisite for achieving a high level of service quality is the ability to measure it. The success or failure of a company is measured by the customer satisfaction relating to the service provided by the company (Musa 2015). Furthermore, quality service will determine customer loyalty to the company and will potentially increase profits (Roslan, Wahab & Abdullah, 2015). If expectations are greater than performance, then perceived quality will be less than satisfactory, resulting in customer dissatisfaction (Lewis & Mitchell, 1990; Parasuraman, Zeithaml & Berry, 1985). However, some researchers have argued that service quality is a theory that is not conclusive. According to them, it is not clear whether service quality is an antecedent of customer satisfaction or vice versa (Bitner, Booms & Tetreault, 1990; Parasuraman et al., 1985; Kritz, 2015).

Logistics service quality is the result of comparing customer expectations with customer perception of service quality. Meidutė-Kavaliauskienė, Aranskis and Litvinenko (2014)

opined that the quality of logistical service perceived by the client is the difference between the perceived service and the expectation. In the current competitive market, customer satisfaction is highly linked to the quality of service provided by the organisation, therefore logistics companies should pay great attention to the quality of their service. The results of a study on logistics companies conducted by Meidutė-Kavaliauskienė et al. (2014) in Lithuania showed that a high quality of services increased their competitive advantage.

The road to high quality service comprises many steps. Zeithaml et al. (1988) identified the following elements as obligatory in improving service quality:

- Managing evidence: in this step, the company has to control the tangible aspects of the service facility so that they convey the correct cues to the customers about the company's service quality.
- Managing the customers' expectations: the company should be transparent and not raise customer expectations by giving false hope in an attempt to promote the business.
- Educating customers about the service: the company should keep customers informed about the service policies and procedures to increase their understanding of the service provided so that customers will align their expectations with the company's capabilities.
- **Developing a quality culture**: the company should teach the notion of quality to all its employees so that the business will be able to maintain and improve the quality of its service.
- **Automating quality**: reducing room for error by introducing automated systems will lead to an increase in service quality and ultimately customer satisfaction.
- **Following up on the service**: this allows the company to improve on certain areas where service might be lacking by obtaining customer feedback.

# 2.10. SERVQUAL as a Tool for Measuring Service Quality

"It is apparent that there is little consensus of opinion and much disagreement about how to measure service quality" (Robinson, 1999:23). The SERVQUAL model is one service quality measurement that has been extensively used (Shahin, 2004). SERVQUAL measures customer expectations and perceptions of the service quality (Zeithaml et al., 1988). It uses 22 items (centred on five dimensions) to evaluate quality using gap analysis (Mashhadiabdol, Sajadi & Talebi, 2014). Researchers have been applying this model for many years, to assess the service

quality in different industries such as transportation, libraries, hotels, e-commerce, etc. (Ferdousi, Baird, Munir & Su, 2019). The 22 pairs of Likert scale statements of SERVQUAL are structured around five service quality dimensions (Peprah & Atarah, 2014). A study conducted by Amoah, Radder, van Eyk and Elizabeth (2016) on guesthouses in Ghana, recommended that all the dimensions of SERVQUAL be attended to wherever there is a gap between customer expectations and perceptions. Another study conducted by Marinković, Senić, Kocić and Šapić (2013) in Serbia concluded that four SERVQUAL dimensions (reliability, responsiveness, empathy and tangibility) had a significant impact on customer satisfaction.

The following table illustrates the five dimensions of SERVQUAL, which underpin this study. These dimensions are used by customers to measure service quality. Organisations can establish whether or not they are meeting customer expectations by determining how customers rate their service, based on these dimensions.

**Table 2.1: Five dimensions of SERVQUAL** 

Dimension	Definition
Tangibles	"Physical facilities, equipment and appearance of personnel"
Reliability	"Ability to perform the promised service dependably and accurately"
Responsiveness	"Willingness to help customers and provide prompt service"
Assurance	"Knowledge and courtesy of employees and their ability to inspire trust and confidence"
Empathy	"Caring, individualised attention the firm provides its customers"

Adapted from: Parasuraman, Berry and Zeithaml (1991: 338)

#### 2.11. Theoretical Framework

The theoretical framework used in this study is the SERVQUAL model. This model provides the five dimensions that a customer uses to measure service quality. It further elaborates on the dimensions and how customers weigh these differently, according to their individual expectations. Closing the gap between customer perceptions and their expectations of a service received is imperative to ensuring customer satisfaction (Baki et al., 2009). Establishing customer perceptions will assist organisations to pinpoint and focus on the dimensions that will increase customer satisfaction. As previously mentioned, customer satisfaction has a direct impact on the performance of an organisation.

The basic elements of this theory are presented in the figure below, with each element explained thereafter.

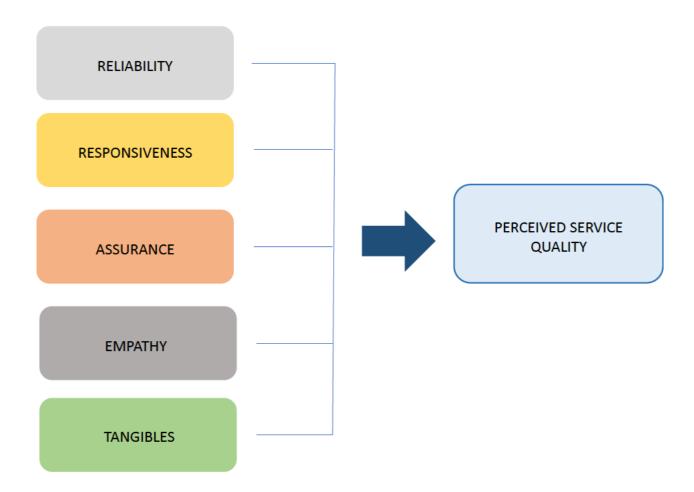


Figure 2.2: Measuring service quality: SERVQUAL Model (Parasuraman et al., 1994)

 1st Construct: Reliability refers to the ability of the organisation to perform the service required and to do it without hesitation. Customers want to be able to rely on the organisation to perform as per their promises. The customer expects that the

- organisation will deliver services accurately and effectively (Baki, Sahin Basfirinci, Muratar & Cilingir, 2009).
- 2<sup>nd</sup> Construct: Responsiveness refers to customer assessment of service quality based on the speed at which the organisation will deliver the service. This dimension forms more than ½<sup>th</sup> of the assessment made by customers. The speed at which the organisation delivers the service is based on the prompt, rapid and immediate delivery of service. The customer assesses the willingness of the organisation to provide the service (Baki et al., 2009).
- 3<sup>rd</sup> Construct: Assurance refers to the customer expectation that the organisation is capable of delivering the service. The customer measures the service quality based on the expertise of the organisation, which is based on their competencies. The customer has confidence in the organisation and feels secure in their abilities to deliver the service (Baki et al., 2009).
- 4<sup>th</sup> Construct: Empathy refers to the customer perceiving service quality by way of concern for the individual. Here the customer is concerned with how much the organisation will individualise or customise their service to meet their requirements or specifications. Emphasis is placed on how the service was delivered, and how the customer felt in the process. How the customer felt will determine how the organisation's service quality is perceived (Baki et al., 2009).
- 5<sup>th</sup> Construct: Tangibles refers to the customer perception of service quality based on the physical appearance of the organisation. It is seen as the least important of the dimensions; however, it has a bearing on the assessment of service quality made by a customer. Here the customer will assess the physical appearance of the organisation and make a decision regarding the service quality on that basis (Baki et al., 2009).

The SERVQUAL theory reveals the perceptions of customers, which are used to measure the quality of services provided by an organisation. The order of importance of each dimension provides the organisation with insight as to how each dimension contributes to the customer assessment, from the most to the least influential. The motivation for the management of quality should depend on the perceptions of customers and the dimensions used to assess such quality (Baki et al., 2009)

## 2.12 Application of Theory

The dimensions of the SERVQUAL theory will be used to measure customer perceptions of the quality of service offered. Furthermore, the theory will be utilised to determine whether the current QMS at Company A addresses these dimensions from the internal perspective (that of employees), the effects of quality within the organisation, the challenges associated with management of quality and continuous improvement considerations.

### 2.12.1. Service Quality Gap Model

An extension of the model proposed by (Ara and& Zargar (2018) has revealed seven major gaps in the service quality concept (Shahin, 2014). (Arukutty, (2018) has concluded that the three important gaps which are most likely to be linked to the external customers are Gaps 1, 5 and 6. Figure 2.3 illustrates the Gap analysis discussed thereafter:

The goal is for the researcher to determine the customer perspective and identify any gaps between customer expectations and Company A's service quality.

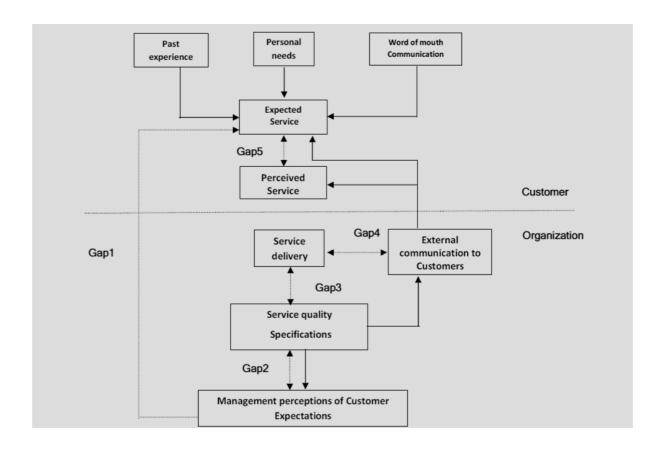


Figure 2.3: The Service Quality Gap Model (Siami & Gorji, 2012)

The Service Quality Gap Model identifies the different gaps which can be identified in the service quality scope. As such those relevant to Company A were identified in the development of appropriate recommendations in this study. All seven gaps are described briefly below.

- **Gap 1**: Customer expectations versus management perceptions, as a result of a shortcoming in marketing research orientation, inadequate upward communication and too many layers of management.
- **Gap 2:** Management perceptions versus service specifications, resulting from inadequate commitment to service quality, a perception of unfeasibility, inadequate task standardisation and the absence of goal setting.
- Gap 3: Service specifications versus service delivery, relating to poor employee-job fit and poor technology-job fit, inappropriate supervisory control systems and lack of teamwork.
- **Gap 4:** Service delivery versus external communication, as a result of inadequate horizontal communications and the propensity to over-promise.
- **Gap 5:** The discrepancy between customer expectations and their perceptions of the service delivered, resulting from the influences exerted on the part of the customer and the shortfalls on the part of the service provider.
- **Gap 6:** The discrepancy between customer expectations and employee perceptions, emanating from the differences in the understanding of customer expectations by front-line service providers.
- Gap 7: The discrepancy between employee perceptions and management perceptions, resulting from the differences in the expectations between managers and service providers.

## 2.13. Chapter Summary

This chapter reviewed numerous literature resources focusing on the management of service quality in an organisation. Moreover, the SERVQUAL model was established as one of the oldest methods of measuring customer perceptions of service quality (Cronin Jr & Taylor, 1994a; Wen & Lin, 2016). The existing literature emphasised that it is necessary to determine customer perceptions of quality prior to structuring the QMS.

As discussed in this chapter, the gaps between customers perceptions and service delivery are often significant (Shahin 2006) and this requires that an organisation conduct a gap analysis to

identify these gaps and determine where and how they can be closed (Brown & Swartz, 1989). A detailed review on QMSs was also presented in this chapter, establishing how these shape the actual delivery of the service. The chapter further reviewed aspects critical to TQM, and how these play a significant role in numerous organisations, particularly in ensuring continuous improvement of service quality (Singh et al., 2018). Aligning the principles of TQM with that of the organisation's culture is a recommended strategy to ensure that the employees of the organisation are committed to service quality (Sinha et al., 2016).

A direct correlation between customer perception of quality and the actual service delivered can be identified throughout literature. An even more prevalent link that can be identified is between customer perception of the actual service delivered and customer satisfaction (Kattara et al., 2008). An organisation's key objective is customer satisfaction, and ultimately any discrepancy between what the customers expect and the determination of what is delivered could mean the difference between the organisation's success or failure.

The next chapter (Chapter Three) discusses the methodology used to conduct this research project. The chapter will discuss the research approach, research design, the sampling technique, target population, data collection techniques and the other facets that pertain to the research methodology.

#### **CHAPTER THREE:**

#### RESEARCH METHODOLOGY

#### 3.1. Introduction

Research is generally based on some basic philosophical assumptions about a given problem (Barnett, 2007). Research can be considered a voyage of discovery (Clayton, 1986). Research methodology is a way to methodically address a particular research problem (Kothari, 2004). The research methodology moves from the basic assumptions to research design, and data collection. This particular chapter addresses the research design and the methods employed to answer the research questions, repeated below:

- 1. How does reliability influence the perception of service quality?
- 2. Does responsiveness influence the perception of service quality?
- 3. To what extent does assurance influence the perception of service quality?
- 4. Does empathy influence the perception of service quality?
- 5. Do tangibles influence the perceptions of service quality?

The chapter explains the population of the study, the data analysis method, the research instruments used, the validity and reliability of the research instruments, the sampling method and how the issues of ethical clearance were addressed.

## 3.2. Research Paradigm

Fietzek and Kuehn (1976) describe the research paradigm as a set of beliefs, a covenant between researchers on how to understand and address problems. Four main research paradigms have emerged from the literature (Kothari, 2004) namely Positivism, Interpretivism, Pragmatism and Advocacy (Rahi, 2017). A positivist approach refers to the extent to which the researcher relies solely on scientific evidence in the form of statistics or experiments, to reveal the true nature of society and how it operates (Fietzek & Kuehn, 1976). A pragmatist paradigm allows for a mixed method approach to research, overlooks truth and reality, and instead uses what works as "truth" in relevance to the question at hand (Tashakkori & Teddlie, 2003).

For the purpose of this study, the researcher has chosen the critical research paradigm. A critical paradigm can be defined as a process that involves gathering and evaluating information, ideas and assumptions from more than one perspective in order to produce a well-reasoned analysis and understanding of a particular topic (Bhattacherjee, 2012; Tashakkori & Teddlie, 2003).

This approach to research is utilised with the intention of generating new ideas, applications and questions.

## 3.3. Research Design and Strategy

Research design is defined by Webb and Auriacombe (2006) as entailing a plan, strategy or structured framework detailing how researchers intend to conduct their research process with the purpose of solving research problems. Linked to this, research strategy provides overall direction to the research, including the process by which the research is conducted (Comba & Remenyi, 2003).

A case study research design is defined by Bhattacherjee (2012) as a method of intensively studying a phenomenon over time within its natural setting in one or more sites (Bhattacherjee, 2012). This study used a case study research design which was appropriate as it is effective in bringing the researcher to an understanding of a complex research issue and it is able to extend the body of knowledge of the known about a phenomenon, through previously conducted research (Masud, 2018).

The researcher chose a case study design as it has been widely utilised to examine contemporary, real-life situations and to provide application ideas and the extension of methods. Additionally, this type of design contributes to building theory in an interpretive fashion (Harrison, Birks, Franklin & Mills 2017). This design has the ability to change research questions when required, and it provides a deeper, more contextualised and authentic interpretation, particularly when compared to other designs (Naik et al. 2010). "The most noticeable advantage is that a case study might cater an accurate analysis among the individual case" (Mahadi & Husin, 2021).

Company A is one of very few black-owned logistics companies in Pietermaritzburg, KwaZulu-Natal. The researcher chose this company based on the lack of research done on black-owned SMMEs of this nature, particularly as this industry is dominated by those larger in size. Adding to the knowledge around QMS in the local businesses is one of the main reasons that the researcher chose this company. Based on the former, the research was aimed at conducting a detailed contextual analysis of the QMS at Company A in KwaZulu-Natal Province, South Africa. In addition, this particular approach to research contributes to identifying the kinds of challenges and difficulties an organisation faces in relation to quality management (Webb & Auriacombe, 2006). Similarly, it reveals the expectation of the

customers of Company A, when it comes to service quality. More importantly, the research focuses on identifying gaps between customer expectations and management perceptions of service quality (Kothari, 2004). Lastly, this research will assist in assessing whether Company A's management team need to reassess the QMS within their organisation.

## 3.4. Nature of the Study

There are three major categories regarding the nature of research, namely, descriptive, causal and exploratory research. Descriptive research is a qualitative type of study, with the goal of providing information on relevant aspects of an event, situation, or organisation (Ab Talib, Rubin & Zhengyi, 2013). This type of research is thus conducted under circumstances where the researcher's intention is to describe the characteristics of a particular situation or variable of interest. The current study does not require the researcher to probe further, but simply to clarify only what is intended for measurement.

Causal research analyses the degree to which the relationship between cause and effect varies or occurs simultaneously, through the use of hypothesis testing. The researcher can only imply that the cause has a certain effect based on the results determined; however, there could be numerous causes that result in the observed phenomenon (Krause et al., 2001).

Exploratory research is common when a researcher seeks to gain a better understanding of a certain phenomenon. This type of research usually lays the foundation for future research, particularly surrounding the topic of choice (Kowalczyk, 2014). The researcher conducting exploratory research experiences flexibility in the way in which the data is collected; they are able to collect as much data as possible so as to generate a deeper understanding of the particular situation (Kothari, 2004).

Upon assessment of the study objectives, and determination of the type of information required from this study, the researcher decided to conduct this study using an exploratory research approach. This particular study is intended to provide insight surrounding the management of quality in the transport and logistics industry (Psomas & Pantouvakis, 2015).

### 3.5. Research Approaches

Two considerably different research methodologies exist, qualitative and quantitative. These methods differ based on variables, constructs and language. Creswell (2013) defines

quantitative methodology as involving variables and the analysis of the relationships between them, the participants of the study and the place where the research is conducted. Quantitative research employs numerical methods such as scores and metrics and regression analysis (Bhattacherjee, 2012).

Qualitative research is at the opposite end of the spectrum, as questions are asked that require an in-depth level of thinking (Bhattacherjee, 2012; Galloway, Kriukow & Numajiri, 2017), and the analysis does not necessarily utilise statistics. This form of research methodology relies on non-numeric data and includes interviews and observations (Willis & Elman 2020).

This study used a mixed methods approach, as a combination of quantitative and qualitative data was required to interpret customer perceptions and their relationship to Company A's QMS. The interpretive requirement of the study justified the use of mixed methods, which provides unique insights (Bhattacherjee, 2012). The mixed methods approach fit well with the case study design used; it resulted in an interpretive analysis of information which will further assist in improving the understanding of the phenomenon presented in this study.

In using more than one type of instrument, this study both explored and described whilst also analysing relationships between variables (Galloway et al., 2017) and providing a statistical analysis of data relevant to the management of quality at Company A.

#### 3.6. Study Site

The study was conducted at Company A in Pietermaritzburg, KwaZulu-Natal Province, South Africa. Company A's offices are situated in the suburb of Mkondeni, at an industrial building in a logistics hub.

#### 3.7. Target Population

"A population can be defined as all the people or items (unit of analysis) with the characteristics that one wishes to study" (Bhattacherjee, 2012: 65).

The target population for this study were the customers and staff of Company A within the KwaZulu-Natal Province. Company A employs over 50 employees, including one Chief Executive Officer, and various members of management.

### 3.8. Sampling Approach

This study comprised of two samples, the first being Company A customers and the second being employees involved in quality management with the organisation. There are a large number of strategies and techniques available in selecting a representative sample of any study. Generally, a study can either be conducted using a probability sampling method or a non-probability sampling method. In a probability sampling method, the opportunity for individuals to be selected is equal, while non-probability sampling presents the use of personal judgement of the researcher in selecting the participants to take part in the study (Ab Talib et al., 2013).

Non-probability sampling is a technique where some units of the population have zero chance of selection or their probability of selection cannot be accurately determined (Bhattacherjee, 2012). This technique was utilised in the study, as the researcher decided which of the staff and customers to approach for inclusion in the sample. This selection of this sample was made up of those employees involved in the management of quality within the organisation. Standardised questionnaires and in-depth interviews were used to collect data from customers and employees, respectively.

For the purpose of this study, not every individual making up the population had a fair chance of selection; the researcher used personal judgement in the selection of participants. In this study, the researcher selected employees within the organisation who could provide desired information relevant to quality management. The selected customers were those that required feedback from internal quality audits conducted by Company A. The judgement approach is defined by Ab Talib et al. (2013) as the researcher choosing a population that is sufficiently well informed and can provide information that is advantageous necessary (Stopka, Černá & Zitrický, 2016). This approach was deemed appropriate for this study.

### 3.9. Sample Size

Sampling is the selection of a smaller group from the target population of study (Bhattacherjee, 2012). From the staff, all of those involved in making key decisions in the management of quality within the organisation were selected, using a census approach. In total, the researcher included 10 staff in the sample. In the customer group, 14 were selected from the customer database.

This study used mixed methods, consisting of in-depth interviews (qualitative data collection) and standardised questionnaires (quantitative data collection). The decision to use these

particular data collection tools was based on the samples and the type of information required from each group. The staff involved in the management of quality participated in the in-depth interviews. The customers were provided with the standardised questionnaires.

#### **3.10. Data Collection Methods**

These instruments complement the research design and methodologies of this study. They result in effectively accessing participants' point of views and perceptions regarding the phenomenon of this study. The two methods used are detailed in the sub-sections that follow.

#### 3.10.1. Semi-Structured Interviews

The aim of the interviews was to realise the objectives of the study from the internal perspective of the company. Semi-structured, in-depth interviews were utilised to gather information from the key personnel within the organisation. These interviews enabled the researcher to determine the perceptions and experiences of the interviewees. The questions were specifically designed to collect data relevant to the management of quality and the QMS at Company A.

Each interview was conducted at a time that best suited the participant concerned. Following permission from the organisation, it was possible for the researcher to schedule telephonic sessions with the employees relevant to the study. The sessions needed to be conducted virtually, rather than face-to-face, due to restrictions in place as a result of the global Covid-19 pandemic. Convenient times were scheduled and the researcher was responsible to provide a comfortable environment for the individuals in which they would feel free to share their perceptions and views. The interviews were conducted on a one-on-one basis, which provided privacy for the employees. The semi-structured nature of the interview allowed the interviewer to probe where responses were unclear or when more clarity was necessary.

The interview design was based on the dimensions represented by the SERVQUAL framework. It was therefore divided into five sections, addressing reliability, responsiveness, assurance, empathy and tangibles as measures of service quality. Each section consisted of questions that were directly relevant to the respective dimension, and the maximum number of questions in each section was six. The five topics covered in each section are discussed below.

❖ Section 1: Reliability (Cronin Jr & Taylor, 1992) − This section explored the element of service provider's abilities to perform the promised service dependably and accurately (Roslan et al., 2015). Employees addressed the ability of the organisation to

meet customer requirements, in addition to how each employee rates the organisation in achieving this. Questions probing the extent to which employees believe that customers can depend on the organisation to address their problems (Cronin Jr & Taylor, 1994a). Topics such as accurate delivery of the service, accurate problem solving, dependability, and delivering on promises were also addressed in this section (Cronin Jr & Taylor, 1994a).

- ❖ Section 2: Responsiveness (Cronin Jr & Taylor, 1992) This section addressed the element of the ability of the organisation to provide prompt service and the willingness to help their customers (Roslan et al., 2015). Employees commented on the timeliness of the organisation in meeting requests from the customer and this section allowed employees to provide their perspective on how prompt the organisation was in terms of responding (Cronin Jr & Taylor, 1994a). Some questions included how quickly requests were addressed, whether the organisation allowed last-minute client requests, if employees were always ready to meet these requests and the organisation's response to emergencies (Cronin Jr & Taylor, 1994a).
- ❖ Section 3: Assurance (Cronin Jr & Taylor, 1992) − This section explored element that represents the knowledge and courtesy of the organisation and its ability to convey trust and confidence (Roslan et al., 2015). Employees commented on how confident they think customers were in the ability of the organisation to solve existing problems in their own organisations. The employee could elaborate on how well they thought the organisation would attend to problems, and whether they perceived the organisation as being competent in their field (Cronin Jr & Taylor, 1994a). The topics in this section included the organisation's transparency and honesty, and the way in which the employees dealt with customers. This section also addressed the topic of sufficient support from employees within the organisation when gauging the perceptions of the employees involved in quality management (Cronin Jr & Taylor, 1994a).
- ❖ Section 4: Empathy (Cronin Jr & Taylor, 1992) The element addressed in this section addressed the organisation's ability to provide individual care and attention to each customer (Roslan et al., 2015). The interview also addressed whether the organisation's employees perceived themselves as addressing or meeting the customer need to feel valued (Cronin Jr & Taylor, 1994a). In this section, employees addressed topics on customisation of services, effective communication with customers and simplification of work through the service they provide. Employees indicated whether they perceived themselves as a group of individuals who could understand their customers'

- organisations in a way that would allow for suitable and accurate solutions to be implemented (Cronin Jr & Taylor, 1994a).
- ❖ Section 5: Tangibility (Cronin Jr & Taylor, 1992) This element is described by Roslan et al. (2015) as representing the appearance of the personnel, physical facilities, equipment and communication materials of the organisation. Employees addressed whether the organisation provides technologies that are flexible in advancement and possess the ability to change based on customer requirements (Cronin Jr & Taylor 1994a).

## 3.10.1.1. Advantages of semi-structured interviews

Kumar, Tat Kee and Charles (2010a) suggest that semi-structured interviews are the best tool when the researcher aims to collect structured information, as well as information on their respondents' attitudes, behaviour and feelings. Some advantages of semi-structured interviews are presented by (Case, 1990):

- 1. Information obtained from semi-structured interviews will frequently provide more than just the answers, but also tend to provide reasons for the answers (Case, 1990).
- 2. Due to the open nature of semi-structured interviews, the framework permits a more conversational, two-way communication between researcher and participant than other data collection tools (Case, 1990).
- 3. A result of probing is that some questions are created during the interview and this allows for flexibility in the manner in which the interview is conducted and ultimately raises more information. This probing could result in a more detailed and in-depth discussion on the phenomenon. Discussing sensitive issues also becomes easier for interviewees (Case, 1990).
- 4. The recording of the interview using audio or video is easier when conducting semi-structured interviews compared to other data collection methods (Case, 1990).

The researcher's decision to adopt semi-structured, in-depth interviews was based on the ease of access to rich data. To allow for in-depth data collection, telephonic interviews were conducted of employees at Company A. During the same time period, questionnaires were distributed electronically to the customers of Company A. Eight employee respondents were interviewed to share their experiences of the phenomenon under study. See Appendix B for the interview schedule.

#### **3.10.2. Field Survey**

Field surveys are non-experimental designs that do not control or manipulate the independent variables, but measure variables and test their relationships using statistical methods (Bhattacherjee, 2012).

The questionnaire was structured into five sections. This tool was utilised to determine the perspective of the customers with regard to the service quality of Company A. The sections addressed the dimensions found in the framework underpinning this study, namely reliability, responsiveness, assurance, empathy and tangibility, in alignment with the design of the semi-structured interviews. All questions required a rating by the customer of between 1 and 9, with 1 being the strongly disagree rating and 9 being the strongly agree rating. See Appendix C for the customer survey.

Section 1: Reliability – this section addressed questions, regarding the ability of the organisation to meet the customer requirements, in addition to how each employee rates the organisation in achieving this (Roslan et al., 2015). Addressed in this section are questions surrounding how much a customer can depend on the organisation to address their problems. Topics such as accuracy relevant to delivery of the service; problem solving; dependability; and delivery of promises were also addressed in this section (Cronin Jr & Taylor, 1994a).

Section 2: Responsiveness (Cronin Jr & Taylor, 1994a) – this section addressed the timely manner in which the organisation meets requests from the customer and allows customers to provide their perspective on how prompt the organisation is (Roslan et al., 2015). Some questions included how quickly requests are addressed, whether or not the organisation allows last minute situations, if employees are always ready to meet these requests and the organisations response to emergencies (Cronin Jr & Taylor, 1994a).

Section 3: Assurance – this section addressed how confident the customer is in the ability of the organisation to solve existing problems in their own organisations. The employee elaborated on how well they think the organisation attended to problems, and whether they perceived the organisation as competent in their field (Cronin Jr & Taylor, 1994a). The topics in this section included organisation's transparency and honesty, in the way they deal with customers. This section also addressed the topic of sufficient support from employees within the organisation in the perception of the employees involved in quality management.

Section 4: Empathy – this section of the interview addressed whether the organisations customers perceived the employees as addressing their need for feeling valued (Roslan et al., 2015). In this section, customers addressed topics surrounding customisation of services, effective communication with employees and simplification of work through the service they provide. Customers indicated whether they perceive employees as a group of individuals who understand their customers' organisations in a way that allows for suitable and accurate solutions to be implemented (Cronin Jr & Taylor, 1994).

Section 5: Tangibility – this section of the interview addressed the physical attributes of the organisation and what portrayal spanned from them (Cronin Jr & Taylor, 1994a). Topics such as technological advancement capabilities for the organisation, appearance of facilities and their consistency with the industry, as well as how presentable employees within the organisation were (Roslan et al., 2015). Customers addressed whether the organisation provides technologies that are flexible in advancement and possess the ability to change as per customer requirements.

### 3.10.2.1. Advantages of field surveys

- 1. The wide geographical reach of this data collection tool is an advantage. A field survey can be sent across geographical boundaries and therefore allows for greater reach (Kothari, 2004).
- 2. The cost of surveys is low in comparison to other methods. The initial cost lies in producing the survey, beyond that there is little to no cost to when conducting the survey (Kothari, 2004).
- 3. There are many sample designs that a researcher can choose from, some are relatively more precise than others (Kothari, 2004). The statistical significance of a survey's findings is generally higher due to the high representative nature. The survey is one of the highest in statistical significance in comparison to other methods (Kothari, 2004).
- 4. Highly convenient data gathering such as a survey can be distributed using numerous means, including e-mail, fax and post (Kothari, 2004).

Cross-sectional field surveys were used in this study as they measure the independent and dependent variables at the same point in time (Bhattacherjee, 2012). This best suited the strategy of the study, as the objectives were to determine if the customer perception of service

quality is dependent on the dimensions of the SERVQUAL model and respondents completed a single survey to measure the independent and dependent variables.

This study used both the structured in-depth interviews and the cross-sectional field study survey to determine the perceptions and experiences of a sample of both staff and customers regarding the service quality of Company A. Structured in-depth interviews were used specifically to gather information on feelings, beliefs, experiences and reactions of staff to the company's quality management and QMSs. The reason for the use of the cross-sectional field study was to determine the independent and dependent variables in the customer experience of quality and to determine their relationships.

#### **3.10.3. Measures**

The semi-structured interview guide included a scale of 1 to 5 in each question. The participants were requested to rate the organisation based on each aspect arising from the question. This assisted in measuring the responses from employees relevant to quality management within the organisation.

A nine-point Likert scale was utilised in the structured questionnaire, with 1 representing low and 9 representing high. Each section of the Likert scale was based on the dimensions from the theoretical framework underpinning the study. Each section consisted of questions relating to the previously mentioned dimensions, namely reliability, responsiveness, tangibility, empathy and assurance.

#### 3.10.4. Procedures

Data collection commenced on 10<sup>th</sup> September 2020, with secondary data obtained from the organisation in the form of manuals, policies and audit documentation on their QMS. Restrictions related to Covid-19 prevented the collection of some secondary data as access to the premises was prohibited.

A questionnaire was distributed based on the relevant customer list. An interview was conducted virtually by the researcher with various employees involved with management of quality within the organisation. A total of 10 questionnaires were distributed and eight employees were interviewed.

#### 3.10.5. Inclusion and Exclusion Criteria

The inclusion criteria for employees were based on those employees that were directly involved in the management of quality within the organisation. These are the employees who utilise the QMS that exists within Company A. All other employees not directly involved with quality in the organisation met the exclusion criteria.

The inclusion criteria for customers were based on those customers who formed part of the scheduled audit process within the organisation. It should be noted that although in this particular industry, quality is measured using different aspects, namely health, safety, environment, risk and quality, these customers were at the helm, with the ability to evaluate the service of the organisation in line with the QMS.

#### 3.10.6. Document Collection

At different phases of the study, where necessary, the researcher requested different documents, from staff. Staff were requested to provide contextual data necessary for the study. Documents were also collected from websites relevant to Company A. The gathering of such contextual information shed light on some of the research questions relevant to the study and provided triangulation of the data collected in the study. Such documents included annual reports, magazine articles, media releases and website pages. All documents that were collected were related to quality management or to the QMS of Company A. These were not included in the literature review to protect the identity of the company.

## 3.11. Data Quality Control

Data quality is essential to ensure that research accurately measures variables in line with the intended purpose of a particular study. Data quality control is thus necessary to maintain a high probability of preventing irregularities and errors in a study (Wang, Storey & Firth, 1995) . Ensuring reliability and validity of instruments used in data collection will assist in ensuring that the quality of data is controlled.

### 3.11.1. Reliability and Validity

Validity determines whether the research truly measures variables relating to a particular phenomenon, in accordance with the intended purpose as per reason for conducting the study (Golafshani, 2003). Validity test techniques include face validity, content validity, construct

validity, criterion validity and judgement by a panel of experts (Taherdoost, 2016). Validity looks at two separate aspects of the research, depending on the type of research that is being conducted. Ab Talib et al. (2013) and Golafshani (2003) emphasise that in a quantitative sense, validity mainly refers to whether the instrument used in measurement in the study is accurate, while validity in qualitative research refers to the extent to which the results accurately represent the collected data (internal validity), and the extent to which the data can be transferred to another similar setting (external validity).

Reliability is a measure of the consistency of the research instrument (Golafshani, 2003). The topic of reliability involves testing the credibility of the findings. Nadim and Goulding (2007) refer to reliability as being the likelihood of participants giving the required information with zero levels of bias.

"Maintaining meticulous records and a systematic chain of evidence over the duration of the study is critical; as is being able to access, present and explain procedures supports the ethical integrity and rigor of the research and findings" (Harrison et al., 2017). The researcher ensured that any records obtained from the interviews or questionnaires were handled with the utmost integrity. The interviews provided rich and insightful information from the customers, which resulted in the researcher's ability to make sense of complex organisational realities — with the pattern of validity improved (Saunders & Townsend 2016).

#### 3.11.2. Pre-testing

A pilot study was conducted among Company A's staff. A trial test was conducted on five (5) respondents who fell within the same group from which selections for the employee sample had been made and their impressions of the interview guide were satisfactory. The final version of the research instrument was not modified as the pre-testing process showed that respondents understood the research instrument. The field survey used items from the literature that have been shown to produce valid and reliable results, such as the SERVQUAL framework which is a well-established method.

#### 3.12. Data Analysis

Talib et al. (2012) define data analysis as the process of statistically analysing the data gathered through the use of research instruments. Data collected from this study was analysed using a statistical analysis approach. Version 23 of SPSS was used to analyse data collected using the

research instrument. Responses from the questionnaire were coded and exported into SPSS for analysis.

Content analysis was used as a technique to analyse data from the interviews. Content analysis is suitable for qualitative data, and in line with an interview which is of a qualitative nature. When analysing text data, qualitative content analysis is one of numerous methods that can be used. Some other methods include grounded theory, historical research and ethnography, to name a few. Elo and Kyngäs (2008) state that it is possible, through content analysis, to distil words into specific content-related categories. This simplifies the data collected and allows for the simplified translation of information.

In the case of the current study, the five dimensions identified in accordance with the theoretical framework were reliability, responsiveness, assurance, empathy and tangibility. As mentioned above, SPSS was used in the analysis of information gathered using the survey instrument. However, content analysis was utilised in the analysis of information collected using both the semi-structured interviews and the questionnaires.

#### 3.12.1. Ethical Considerations

A letter of consent was obtained from Company A providing permission to conduct the study. The permission confirmed the participation of the organisation in the study. A Gatekeeper's letter was signed by a relevant organisational representative and along with a completed ethical clearance application form, was submitted to the Research Office, University of KwaZulu-Natal. Ethical clearance was received in the form of a letter dated 9<sup>th</sup> September 2020 (see Appendix D). Data collection commenced thereafter based on guidance from the Research Office of the University of KwaZulu-Natal on how to behave ethically and appropriately during the research process. The researcher remained compliant with the ethical requirements of the university.

According to Beauchamp and Childress (2001), there are four ethical considerations for a research project – the following three are relevant to this study:

1. Autonomy is referred to as the freedom given to a selected potential respondent to choose to participate in the study or to decline to do so, about which they have the necessary knowledge, without any fear of repercussions. To ensure autonomy, participants had the choice to willingly participate or not. An explanation of the research project and key concepts of the study were given to the participants willing to participate. A letter of informed consent was given to those

who agreed to participate indicating that they understood the important aspects of the research (see Appendix A). This was completed and returned to the researcher prior to the commencement of data collection. This ensured that every participant participated of their own free will. The document also informed participants of the option to withdraw at any point of the interview should they so wish.

- 2. Non-maleficence refers to the prevention of any type of harm, be it physical or psychological that might occur to the research participants, the Ethical Clearance Committee of the University of KwaZulu-Natal addressed any risk of maleficence by providing ethical clearance for the study (see Appendix D).
- 3. Justice refers to the need for the equality of all participants in the study. All participants were treated equally during this research project and participated voluntarily. Confidentiality of the participants was protected and will continue to be protected in future. The collected data is inaccessible to other parties, and only the researcher knows the identity of Company A. The data is password protected and only the researcher is aware of its contents. Furthermore, the data will be stored safely for five years and destroyed thereafter.

### **3.13. Summary**

This chapter has highlighted and elaborated on how data collection relevant to the study was planned and executed. The methods and techniques used were also explained, as well as the reasons for their selection. The approach which the researcher used to collect, analyse and present the data was also made clear in this chapter.

The reason for various designs, tools, techniques and methods were explained based on the qualitative and quantitative aspects of this study. The use of the field survey/ questionnaire for customers and semi-structured, in-depth interviews for employees was also discussed in detail. Some advantages of the instruments used were also explained in this chapter, further justifying the choice of instruments. A statistical analysis and content analysis were chosen for this study.

As part of the research strategy, a case study approach was discussed and used by the researcher so as to best collect the most detailed data possible.

This study opted for an exploratory research design and a case study as a research strategy. The study used a mixed method to get qualitative and quantitative data. Data was collected from

employees and customers of Company A in Pietermaritzburg. This chapter also discussed the ethical considerations. The next chapter will present the results of the study.

#### **CHAPTER FOUR:**

### FINDINGS OF THE STUDY

#### 4.1. Introduction

Chapter Three addressed the methodology used in this research and expanded on approaches used to gather data. This included the research philosophy, research design, research methods, sampling procedures, the analysis of data, validity and reliability, and finally, ethical considerations. In this chapter, the empirical results of the analysis of the data collected from interviews are presented and described.

## 4.2. Service Quality Dimensions

In this study, the data collected from the interviewees was analysed based on their responses to the five previously mentioned themes (dimensions) of the SERVQUAL model, namely: **reliability, responsiveness, assurance, empathy and tangibility**. Two sets of data were collected from two sets of respondents – customers and employees.

## 4.3. Analyses of Customers' and Employees' Responses

In the structured survey instrument that was used, customers' responses were represented on a rating scale of 1 to 9 with the following labels:

- 1 (One) Very poor
- 2 (Two) Poor
- 3 (Three) Slightly poor
- 4 (Four) Fair
- 5 (Five) Average
- 6 (Six) Slightly good
- 7 (Seven) Good
- 8 (Eight) Very good
- 9 (Nine) Excellent

Employees' responses were represented on a scale of 1 to 5 with the following labels:

- 1 (One) Very poor
- 2 (Two) Poor
- 3 (Three) Fair
- 4 (Four) Good
- 5 (Five) Excellent

Furthermore, the responses of the customers were compared with the responses of the employees to determine if there was any congruence or conflict (Bhattacherjee, 2012; Kothari, 2004).

### 4.3.1. Reliability

The first theme of this study is based on the reliability dimension of the SERVQUAL model. The responses of the customers under this theme were categorized into six variables, as shown below:

**Reliability\_1**: The ability of the organisation to accurately deliver quality service using the most advanced technology.

**Reliability\_2**: The organisation's ability to provide customers with accurate transport and logistics solutions, within promised timeframes.

**Reliability\_3**: The organisation's ability to effectively remedy supply chain problems faced by customer's organisation.

**Reliability\_4**: The organisation's dependability in providing customers with the best possible solutions that will result in successful measurable outcomes.

**Reliability\_5**: The organisation provides services that make it easier for customers to perform their jobs.

**Reliability\_6**: The organisation's ability to meet the needs of customers at promised times, resulting in meeting their own needs.

The analyses of the responses to each variable are shown below.

## 4.3.1.1. Reliability\_1: The ability of the organisation to accurately deliver quality service using the most advanced technology

The results reflect that 50% (n=5) of the customers indicated that the ability of the organisation was above average, in reference to them accurately delivering quality service using the most advanced technology, whereas the remaining 50% (n=5) perceived the ability of the organisation to be fair or average (see Table 4.1).

Table 4.1: The ability of the organisation to accurately deliver quality service using the most advanced technology

Rating		Frequency	Valid Percent
Valid	Fair	1	10.0
	Average	4	40.0
	Slightly good	1	10.0
	Good	4	40.0
	Total	10	100.0

However, all the employees (100%, n=8) that were interviewed indicated that the company had good ability to accurately deliver quality service using the most advanced technology (see Table 4.2). This shows that there were conflicting views between the customers and employees regarding the ability of the organisation to accurately deliver quality service using the most advanced technology.

Table 4.2: How do customers rate the company's ability to accurately deliver quality service using the most advanced technology?

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	7	87.5

# 4.3.1.2. Reliability\_2: The organisation's ability to provide customers with accurate transport and logistics solutions, within promised timeframes

The results showed that most (80%, n=8) of the customers indicated that the organisation was able to provide them with accurate transport and logistics solutions within promised timeframes

(see Table 4.3). This percentage includes all the customers that rated this variable as six, seven and eight.

Table 4.3: The organisation's ability to provide customers with accurate transport and logistics solutions, within promised timeframes

Rating		Frequency	Valid Percent
Valid	Average	2	20.0
	Slightly good	6	60.0
	Good	1	10.0
	Very good	1	10.0
	Total	10	100.0

Similarly, most of the employees (87.5%, n=7) that were interviewed also indicated that the organisation had a good ability to provide customers with accurate transport and logistics solutions within the promised timeframes (see Table 4.4). This shows that the customers and employees agreed on the organisation's good ability to provide customers with accurate transport and logistics solutions within promised timeframes.

Table 4.4: How is the organisation able to provide customers with accurate transport and logistics solutions, within promised timeframes?

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	7	87.5
	Total	8	100.0

# 4.3.1.3. Reliability\_3: The organisation's ability to effectively remedy supply chain problems faced by the customer's organisation

The results of this study showed that the majority (60%, n=6) of the customers indicated that the organisation was able to effectively remedy supply chain problems faced by their organisation (see Table 4.5). This percentage includes all the customers that rated the variable as six and seven.

Table 4.5: The organisation's ability to effectively remedy supply chain problems faced by the customer's organisation

Rating		Frequency	Valid Percent
Valid	Average	4	40.0
	Slightly good	3	30.0
	Good	3	30.0
	Total	10	100.0

Similarly, most of the employees (75%, n=6) that were interviewed indicated that the organisation possessed the ability to effectively remedy supply chain problems faced by the customer (see Table 4.6). This shows that the customers and employees agreed on the organisation's ability to effectively remedy supply chain problems faced by the customer.

Table 4.6: Does the organisation possess the ability to effectively remedy supply chain problems faced by the customer?

Rating		Frequency	Valid Percent
Valid	Fair	2	25.0
	Good	6	75.0
	Total	8	100.0

# 4.3.1.4. Reliability\_4: The organisation's dependability in providing customers with the best possible solutions that will result in successful measurable outcomes

Most customers (90%, n=9) indicated that they could depend on the organisation to provide them with the best possible solutions that would result in successful measurable outcomes. This percentage includes all the customers that rated the variable as six and seven (see Table 4.7).

Table 4.7: The organisation's dependability in providing customers with the best possible solutions that will result in successful measurable outcomes

Rating		Frequency	Valid Percent
Valid	Average	1	10.0
	Slightly good	6	60.0
	Good	3	30.0
	Total	10	100.0

Similarly, most of the employees (87.5%, n=7) also indicated that the organisation was dependable in providing the best possible solutions that would result in successful, measurable outcomes for the customer (see Table 4.8). This shows that the customers and the employees both agreed on the organisation being dependable in terms of providing the best possible solutions that would result in successful, measurable outcomes for the customer.

Table 4.8: Is the organisation dependable in providing the best possible solutions that will result in successful, measurable outcomes for the customer?

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	5	62.5
	Excellent	2	25.0
	Total	8	100.0

# 4.3.1.5. Reliability\_5: The organisation provides services that make it easier for customers to perform their jobs

As shown in Table 4.9, most of the customers indicated that the organisation provided good services that made it easier for them to perform their jobs. The percentage of customers that stated this is 80% (n=8). This percentage includes all the customers that rated the variable as six and seven (see Table 4.9).

Table 4.9: The organisation provides services that make it easier for customers to perform our jobs

Rating		Frequency	Valid Percent
Valid	Average	2	20.0
	Slightly good	6	60.0
	Good	2	20.0
	Total	10	100.0

Similarly, all the employees (100%, n=8) that were interviewed also indicated that the organisation provided services that made it easier for the customers to perform their jobs (see Table 4.10). This shows that the customers and the employees both agreed that Company A's services allowed for the customers to perform their jobs more easily.

Table 4.10: Does the organisation provide services that make it easier for the customers to perform their jobs?

Rating		Frequency	Valid Percent
Valid	Good	8	100.0

# 4.3.1.6. Reliability\_6: The organisation's ability to meet the needs of customers at promised times, resulting in meeting customers' own needs

Eighty percent (n=8) of the customers in the sample indicated that the organisation was able to meet the needs of customers at promised times, which resulted in them meeting their own needs. This percentage includes all the customers that rated the variable as six, seven and eight (see Table 4.11).

Table 4.11: The organisation's ability to meet the needs of customers at promised times, resulting in customers meeting their own needs

Rating		Frequency	Valid Percent
Valid	Average	2	20.0
	Slightly good	3	30.0
	Good	4	40.0
	Very good	1	10.0
	Total	10	100.0

In the same vein, 100% (n=8) of the employees that were interviewed indicated that the organisation was able to meet the needs of the customers at promised times, resulting in customers meeting their own needs (see Table 4.12). Hence, the customers and the employees both agreed that the organisation was able to meet the needs of the customers at promised times, resulting in the ability of customers to meet their own customer's needs.

Table 4.12: Does the organisation meet the needs of the customers at promised times, resulting in the ability of customers meeting their own needs?

Rating	ţ	Frequency	Valid Percent
Valid	Good	7	87.5
	Excellent	1	12.5
	Total	8	100.0

#### 4.3.2. Responsiveness

The second theme of this study is based on the responsiveness dimension of the SERVQUAL model. The customers' responses under this theme were categorised into five variables, as shown below:

**Responsiveness\_1**: The organisation responds to requests from customers promptly and within promised lead times.

**Responsiveness\_2**: The organisation will allow last minute requests from customers and deliver the same quality (as usual).

**Responsiveness\_3**: The organisation will respond promptly to requests sent through by customers.

**Responsiveness\_4**: The organisation's employees are always ready and willing to help customers.

**Responsiveness\_5**: The organisation's response to an emergency is prompt and accurate.

## 4.3.2.1. Responsiveness\_1: The organisation responds to requests from customers quite promptly and within promised lead times

The findings of this study showed that 80% (n=8) of the customers indicated that the organisation had a good ability to respond to requests from them promptly and within promised lead times (see Table 4.13).

Table 4.13: The organisation responds to requests from customers quite promptly and within promised lead times

Rating		Frequency	Valid Percent
Valid	Slightly good	2	20.0
	Good	6	60.0
	Very good	2	20.0
	Total	10	100.0

Similarly, all the employees (100%, n=8) interviewed indicated that the organisation responded to customer requests promptly and within promised lead times (see Table 4.14). Therefore, this shows that both the customers and employees were in agreement about the organisations prompt responses to customer requests, within promised lead times.

Table 4.14: Does the organisation respond to customer requests promptly and within promised lead times?

Rating		Frequency	Valid Percent
Valid	Good	4	50.0
	Excellent	4	50.0
	Total	8	100.0

# 4.3.2.2. Responsiveness\_2: The organisation will allow last minute requests from customers and deliver the same quality

One hundred percent (n=10) of the customers acknowledged that the organisation would allow last minute requests from customers and deliver the same quality as normal (see Table 4.15). Similarly, all the employees indicated that the organisation would allow last minute requests from customers and still deliver the same level of quality (See Table 4.16). This shows that the customers and employers were in agreement regarding this variable.

Table 4.15: The organisation will allow last minute requests from customers and deliver the same quality

Rating		Frequency	Valid Percent
Valid	Slightly good	6	60.0
	Good	2	20.0
	Very good	2	20.0
	Total	10	100.0

Table 4.16: Does the organisation allow for a last-minute request from customers and still deliver the same level of quality?

Rating		Frequency	Valid Percent
Valid	Good	4	50.0
	Excellent	4	50.0
	Total	8	100.0

# 4.3.2.3. Responsiveness\_3: The organisation will respond promptly to requests sent through by customers

All the customers interviewed indicated that the organisation responded promptly to the requests sent through by them (see Table 4.17). Similarly, all the employees interviewed indicated that the organisation responded promptly to requests sent through by customers (see Table 4.18). This shows that the customers and employees both agreed on the organisation's prompt response to requests sent through by customers.

Table 4.17: The organisation will respond promptly to requests sent through by customers

Rating		Frequency	Valid Percent
Valid	Slightly good	3	30.0
	Good	4	40.0
	Very good	3	30.0
	Total	10	100.0

Table 4.18: Does the organisation respond promptly to requests that customers have sent through?

Rating		Frequency	Valid Percent
Valid	Good	3	37.5
	Excellent	5	62.5
	Total	8	100.0

## 4.3.2.4. Responsiveness\_4: Organisations employees are always ready and willing to help customers

All the customers interviewed (100%, n=10) stated that the employees of the organisation were always ready and willing to help them. Out of these responses, 10% rated the organisation's efforts in this regard as slightly good, 40% rated their efforts as good while the remaining 50% rated the organisation's efforts as very good (see Table 4.19).

Similarly, all the employees stated that they were always ready and willing to assist customers. From the employees' responses, 37.5% rated their efforts as good while the remaining 62.5% rated their efforts as excellent (see Table 4.20). Therefore, both customers and employees agreed on Company A employees' constant readiness and willingness to assist customers.

Table 4.19: Organisations employees are always ready and willing to help customers

Rating		Frequency	Valid Percent
Valid	Slightly good	1	10.0
	Good	4	40.0
	Very good	5	50.0
	Total	10	100.0

Table 4.20: Are the organisation's employees are always ready and willing to assist customers?

Rating		Frequency	Valid Percent
Valid	Good	3	37.5
	Excellent	5	62.5
	Total	8	100.0

## 4.3.2.5. Responsiveness\_5: The organisation's response to an emergency is prompt and accurate

All the customers that were interviewed (100%, n=10) stated that the organisation's response to an emergency was prompt and accurate (see Table 4.21). Also, all the employees that were interviewed stated the same perceptions (see Table 4.22). This shows that both the customers and employees agreed on the organisation's response to an emergency being prompt and accurate.

Table 4.21: The organisations response to an emergency is prompt and accurate

Rating	g	Frequency	Valid Percent
Valid	Slightly good	2	20.0
	Good	4	40.0
	Very good	4	40.0
	Total	10	100.0

Table 4.22: Is the organisation's response to a customer emergency prompt and accurate?

Rating		Frequency	Valid Percent
Valid	Good	6	75.0
	Excellent	2	25.0
	Total	8	100.0

#### 4.3.3. Assurance

The third theme of this study is based on the assurance dimension of the SERVQUAL model. The responses of the customers under this theme were categorised into five variables, as shown below:

**Assurance\_1**: The organisation's employees are trustworthy, honest and transparent in their dealings with customers.

**Assurance\_2**: Customers feel free and safe when transacting with the employees from the organisation.

**Assurance\_3**: The politeness of employees within the organisation is high and makes doing business easy.

**Assurance\_4**: The organisation provides employees with adequate support which allows them to perform their work with reassurance.

**Assurance\_5**: The organisation is transparent in showing customers how they deliver smart transport solutions, which reassure customers of the service.

## 4.3.3.1. Assurance\_1: The organisation's employees are trustworthy, honest and transparent in their dealings with customers

All the customers that were interviewed (100%, n=10) stated that the organisation's employees were trustworthy, honest and transparent in their dealings with them. Similarly, the employees agreed with the customers' views that they were trustworthy, honest and transparent in their dealings with the customers. These findings can be seen in Table 4.23 and 4.24 below.

Table 4.23: The organisation's employees are trustworthy, honest and transparent in their dealings with customers

Table 4.24: Would you say the organisation's employees are trustworthy, honest and transparent in their dealings with customers?

Rating	2	Frequency	Valid Percent
Valid	Slightly good	2	20.0
	Good	3	30.0
	Very good	4	40.0
	Excellent	1	10.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Good	3	37.5
	Excellent	5	62.5
	Total	8	100.0

# 4.3.3.2. Assurance\_2: Customers feel free and safe when transacting with the employees from the organisation

All the customers that were interviewed (100%, n=10) stated that they felt free and safe when transacting with the employees from Company A. Similarly, the employees interviewed also stated that their customers felt free and safe when transacting with the employees within the organisation. See Table 4.25 and 4.26.

Table 4.25: I feel free and safe when transacting with the employees from the organisation

Table 4.26: Do your customers feel free and safe when transacting with the employees within the organisation?

Rating		Frequency	Valid
			Percent
Valid	Good	3	30.0
	Very good	5	50.0
	Excellent	2	20.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	7	87.5
	Excellent	1	12.5
	Total	8	100.0

# 4.3.3.3. Assurance\_3: The politeness of employees within the organisation is high and makes doing business easy

One hundred percent of the customers stated that the employees within the organisation were polite and this made it easy to do business with the organisation. Similarly, 100% of the employees also agreed with the customers that the employees within the organisation were polite, thereby making it easy for customers to conduct their business. The results are reflected in Tables 4.27 and 4.28.

Table 4.27: The politeness of employees within the organisation is high and makes doing business easy

Table 4.28: Are the employees within the organisation polite, making it easy for customers to conduct their business?

Rating	g	Frequency	l
	I		Percent
Valid	Slightly	3	30.0
	good		
	Good	4	40.0
	Very good	3	30.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	4	50.0
	Excellent	4	50.0
	Total	8	100.0

# 4.3.3.4. Assurance\_4: The organisation provides employees with adequate support which allows them to perform their work with reassurance

All of the customers that were interviewed indicated that the organisation provided employees with adequate support which allowed them to perform their work with reassurance (see Table 4.29). Similarly, 80% of the employees agreed that they were being provided with adequate support by the organisation to perform their work with reassurance (see Table 4.30). To a very large extent, the customers and employees agreed on this view.

Table 4.29: The organisation provides employees with adequate support which allows them to perform their work with

Table 4.30: Does the organisation provide adequate support to employees within the organisation, in a way that allows them to perform their work in a manner reassuring to customers?

Rating		Frequency	Valid Percent
Valid	Slightly good	1	10.0
	Good	5	50.0
	Very good	4	40.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Good		50.0
	Excellent	4	50.0
	Total	8	100.0

# 4.3.3.5. Assurance\_5: The organisation is transparent in showing customers how they deliver smart transport solutions, which assures customers of the service

The majority of customers (80%, n=8) stated that the organisation was transparent in showing them how they delivered smart transport solutions, which assured them of the service (see Table 4.31). Meanwhile, 100% of the employees also stated that the organisation provided transparency in showing customers how they delivered smart transport solutions, in a way that was reassuring to customers (see Table 4.32).

Table 4.31: The organisation is transparent in showing customers how they deliver smart transport solutions, which assures customers of the service

Table 4.32: Does the organisation provide transparency in showing customers how they deliver smart transport solutions, in a way that is reassuring to customers?

Rating		Frequency	Valid Percent
Valid	Average	2	20.0
	Slightly	3	30.0
	good		
	Good	2	20.0
	Very good	3	30.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	4	50.0
	Excellent	4	50.0
	Total	8	100.0

### **4.3.4. Empathy**

The fourth theme of this study is based on the assurance dimension of the SERVQUAL model. The responses of the customers under this theme were categorized into four variables, as shown below:

**Empathy\_1**: The organisation values me as a client.

Empathy\_2: The organisation knows its customers and their team and understands their job in how to best assist them

Empathy 3: The organisation is interested in tailoring their service to customer specific needs and providing suitable solutions.

**Empathy 4**: The organisation pays attention to customer needs and makes communicating with them simple.

### 4.3.4.1. Empathy\_1: The organisation values me as a client

All the customers stated that the organisation valued them as clients (see Table 4.33) while all the employees also stated that the customers felt valued by the organisation (see Table 4.34). This shows that both customers and employees feel that the organisation is empathetic in their service delivery.

Table 4.33: The organisation values me as Table 4.34: Would you say customers feel client

valued by the organisation?

Rating	9	Frequency	Valid Percent
Valid	Slightly good	3	30.0
	Good	2	20.0
	Very good	5	50.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	5	62.5
	Excellent	3	37.5
	Total	8	100.0

# 4.3.4.2. Empathy\_2: The organisation knows its customers and their team and understands their job in how to best assist them

All the customers that were interviewed stated that the organisation knew them and their team and understood their job in as far as knowing how to best assist them (see Table 4.35). Similarly, 100% of the employees indicated that the customers perceived themselves as known by their organisation and the customers agreed that the knew how best to assist them (see Table 4.36).

Table 4.35: The organisation knows its customers and its team and understands their job in how to best assist them

Table 4.36: Do you think your customers perceive themselves as known by their organisation and would customers agree that the organisation understands their job of how to best assist them?

Rating	<u> </u>	Frequency	Valid
			Percent
Valid	Slightly	3	30.0
	good		
	Good	3	30.0
	Very good	4	40.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	8	100.0

# 4.3.4.3. Empathy\_3: The organisation is interested in tailoring their service to customer specific needs and providing suitable solutions

A majority (90%) of the customers that were interviewed stated that the organisation was interested in tailoring their service to the customers' specific needs and provided suitable solutions (see Table 4.37). When the employees were interviewed, 87.5% of them also stated that the organisation was interested in tailoring their services to meet the specific needs of the customers and to provide suitable solutions (see Table 4.38).

Table 4.37: The organisation is interested in tailoring their service to customers specific needs and provide suitable solutions

Table 4.38: Is the organisation interested in tailoring services to meet the specific needs of the customers, and to provide suitable solutions?

Rating		Frequency	Valid
			Percent
Valid	Average	1	10.0
	Slightly	4	40.0
	good		
	Good	2	20.0
	Very good	2	20.0
	Excellent	1	10.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	7	87.5
	Total	8	100.0

# 4.3.4.4. Empathy\_4: The organisation pays attention to customer needs and makes communicating with them simple

All the customers indicated that the organisation paid attention to their needs and made communicating with them simple (see Table 4.39). Similarly, most of the employees (87.5%, n=7) also stated that the organisation paid attention to the needs of the customers and made communication simple for them (see Table 4.40). This shows that both the customers and the employees agreed that the organisation paid attention to the customers' needs and simplified their communication with customers.

Table 4.39: The organisation gives attention to customer needs and makes communicating with them simple

Table 4.40: Does the organisation give attention to the needs of the customers, and make communication

Rating		Frequency	Valid Percent
Valid	Slightly good	1	10.0
	Good	5	50.0
	Very good	3	30.0
	Excellent	1	10.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	7	87.5
	Total	8	100.0

### 4.3.5. Tangibility

The fifth theme of this study is based on the tangibility dimension of the SERVQUAL model. The responses of the customers under this theme were categorized into five variables, as shown below:

**Tangibility\_1**: The organisation uses the latest technologies to provide a high level of service quality to customers.

**Tangibility\_2**: The organisation's infrastructure is appealing and consistent throughout the organisation.

**Tangibility\_3**: The organisation's employees are very well presented and well-dressed.

**Tangibility\_4**: The appearance of the physical facilities is consistent with the type of service industry in which the organisation operates.

**Tangibility\_5**: The organisation provides facilities that allow flexible and technologically advanced transport solutions.

# 4.3.5.1. Tangibility\_1: The organisation uses the latest technologies to provide a high level of service quality to its customers

The majority of the customers (80%) that were interviewed indicated that the organisation used the latest technologies to provide a high level of service quality to them (see Table 4.41). Similarly, most of the employees (62.5%, n=5) indicated that the organisation used the latest technologies to provide a high level of service quality to its customers (see Table 4.42). This

shows congruence between the customers and the employees regarding the organisation's use of the latest technologies to provide a high level of service quality to its customers.

Table 4.41: The organisation uses the latest technologies to provide a high level of service quality to its customers.

Table 4.42: Does the organisation use the latest technologies to provide a high level of service quality to its customers?

Rating		Frequency	Valid
			Percent
Valid	Average	2	20.0
	Slightly	1	10.0
	good		
	Good	6	60.0
	Very good	1	10.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Fair	3	37.5
	Good	4	50.0
	Excellent	1	12.5
	Total	8	100.0

# 4.3.5.2. Tangibility\_2: The organisation's infrastructure is appealing and consistent throughout the organisation

Eighty percent of the customers that were interviewed indicated that the organisation's infrastructure was appealing and consistent throughout the organisation (see Table 4.43). Similarly, most of the employees (75%, n=6) that were interviewed indicated that the organisation's infrastructure looked appealing to customers and remained consistent throughout the organisation (see Table 4.44). This shows congruence between the customers and the employees regarding the appeal and consistency of the organisation's infrastructure.

Table 4.43: The organisation's infrastructure is appealing and consistent throughout the organisation

Table 4.44: Does the organisation's infrastructure look appealing to customers, and does it remain consistent throughout the organisation?

Rating		Frequency	Valid Percent
Valid	Average	2	20.0
	Slightly good	2	20.0
	Good	3	30.0
	Very good	3	30.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Fair	2	25.0
	Good	3	37.5
	Excellent	3	37.5
	Total	8	100.0

### 4.3.5.3. Tangibility\_3: The organisation's employees are very well presented and well-dressed

A majority of the customers (70%) that were interviewed indicated that the organisation's employees were very well presented and well-dressed (see Table 4.45). Similarly, all the employees that were interviewed indicated that the organisation's employees were very well presented and well-dressed (see Table 4.46). This shows that there is a congruence between the customers' and the employees' perceptions regarding employees' presentation and dressing.

Table 4.45: The organisation's employees are very well presented and well-dressed

Table 4.46: Are the organisations employees well-presented and well-dressed?

Rating		Frequency	Valid
			Percent
Valid	Fair	1	10.0
	Average	2	20.0
	Slightly	3	30.0
	good		
	Good	1	10.0
	Very good	3	30.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Good	3	37.5
	Excellent	5	62.5
	Total	8	100.0

# 4.3.5.4. Tangibility\_4: The appearance of the physical facilities is consistent with the type of service industry in which the organisation operates

Ninety percent of the customers that were interviewed indicated that the appearance of the physical facilities was consistent with the type of service industry in which the organisation was operational (see Table 4.47). Similarly, most of the employees (87.5%, n=7) that were interviewed indicated that the physical facilities of the organisation were consistent with the relevant service industry of operation (see Table 4.48). This shows a congruence between the customers and the employees regarding the consistency of the organisation's physical facilities with the organisation's type of service industry.

Table 4.47: The appearance of the physical facilities is consistent with the type of service industry in which the organisation operates.

Table 4.48: Are the physical facilities of the organisation consistent with the type of service industry in which it operates?

Rating		Frequency	Valid
			Percent
Valid	Average	1	10.0
	Slightly good	2	20.0
Good		4	40.0
	Very good	2	20.0
	Excellent	1	10.0
	Total	10	100.0

Rating		Frequency	Valid Percent
Valid	Fair	1	12.5
	Good	6	75.0
	Excellent	1	12.5
	Total	8	100.0

# 4.3.5.5. Tangibility\_5: The organisation provides facilities that allow flexible and technologically advanced transport solutions

Sixty percent of the customers that were interviewed indicated that the organisation was good at providing facilities that allowed for flexible and technologically advanced transport solutions (see Table 4.49). Similarly, most of the employees (62.5%, n=5) that were interviewed also indicated that the organisation provided facilities that allowed them to provide flexible and technologically advanced transport solutions (see Table 4.50). This shows a congruence between the customers and the employees regarding the provision of facilities that allow for advanced transport solutions.

Table 4.49: The organisation provides facilities that allow flexible and technologically advanced transport solutions

Table 4.50: Does the organisation provide facilities that allow them to provide flexible and technologically advanced transport solutions?

Rating		Frequency	Valid Percent
Valid	Fair	1	10.0
	Average	3	30.0
	Slightly	1	10.0
	good		
	Good	2	20.0
	Very good	2	20.0
	Excellent	1	10.0
	Total	10	100.0

Rating		Frequency	Valid
			Percent
Valid	Fair	3	37.5
	Good	5	62.5
	Total	8	100.0

#### 4.4. Summary

This chapter presented the results that were obtained from the study. It started off by presenting the findings of the both the employee and the customer respondents.

The results were then analysed in order to determine any gaps in the customers perceptions and that of the employees. SPSS software was used to analyse the data in order to obtain high accuracy. The data analysis was set out using the dimensions outlined by the SERVQUAL model, the basis of the theoretical framework underpinning the study.

Results were presented in tables for ease of comparison. The SPSS results were interpreted in detail. In the next chapter, this data will be interpreted and will consist of a discussion on the findings and the data analysis.

#### **CHAPTER FIVE:**

#### DISCUSSION, RECOMMENDATIONS, AND CONCLUSION

#### 5.1. Introduction

This chapter discusses the findings generated from the study in relation to quality management and its impact on customer decision-making. This study was particularly focused on Company A, a small, medium and micro enterprise (SMME) logistics company. Most literature shows studies of various logistics companies in various countries (Meidutė-Kavaliauskienė et al. 2014; Gorman & Kanet 2011; Maloni, 2019; Martin & Thawabieh 2018), but there is very literature focused on black-owned SMMEs in the logistics industry particularly in South Africa.

This chapter deals with the findings presented in the previous chapter. This study aimed to explore the dimensions that influence customer perceptions which Company A could use to improve the management of quality within their organisation. The continued increase in customer expectations means that organisations need to be cognisant of exactly what those expectations are and ensure that they align to them, ultimately achieving customer satisfaction (Setyawan, Supriyanto, Tunjungsari, Hanifaty & Lestari, 2019; el Saghier & Nathan, 2013). This study therefore seeks to understand the five key dimensions of customer perceptions of quality, namely: reliability, responsiveness, assurance, empathy and tangibility.

Additionally, recommendations for further research are made and aspects such as limitations to the study are addressed. To this end, the results are discussed in relation to the guiding research objectives. To summarise the study, a conclusion of the study is provided and recommendations are made based on the discussion.

Guided by the model of SERVQUAL developed by Zeithaml et al. (1988), qualitative data was collected and examined to address the research objectives. Data was collected through the interviewing of employees involved in quality management and through surveys sent to customers. Gap analysis was used in this study to relate the themes generated from the analysis to the literature using the SERVQUAL model to provide structure.

#### **5.2. Research Objectives**

This study aimed to explore the dimensions that influence customer perceptions which the company could use to improve quality. The data were analysed to address the following research objectives:

- 1. To determine how reliability influences the perception of service quality.
- 2. To ascertain whether responsiveness influences the perception of service quality.
- 3. To determine the extent to which assurance influences the perception of service quality.
- 4. To establish the role empathy plays in influencing the perception of service quality.
- 5. To determine whether tangibles influence the perceptions of service quality.

### **5.3. Research Questions**

- 1. How does reliability influence the perception of service quality?
- 2. Does responsiveness influence the perception of service quality?
- 3. To what extent does assurance influence the perception of service quality?
- 4. Does empathy influence the perception of service quality?
- 5. Do tangibles influence the perceptions of service quality?

# **5.4.** Research Objective 1: To determine how reliability influences the perception of service quality

Under this dimension, customers rated Company A based on their ability to rely on the organisation with reference to advanced technology, accuracy and providing the best possible solutions.

The majority of customers (42%) rated the company as "slightly good" regarding their reliability. Of all five sub-dimensions, it is safe to say that the customers rated the organisation above average, with 73% of the overall ratings falling in the higher intervals of the Likert scale. Based on this, the customers seem to rely on Company A and are satisfied with the service provided with reference to reliability.

When taking into consideration this particular dimension, the vast majority of employees (83%) rated the company "good" with themes like the organisation's ability to meet customer needs and the organisation's ability to provide the best possible solutions being rated "excellent" by 6% of the employee respondents.

Both the customer group and the employee group rated reliability\_5 the highest, and it can therefore be asserted that Company A provides services that make it easier for customers to perform their jobs. Figure 5.1 and 5.2 below refer:

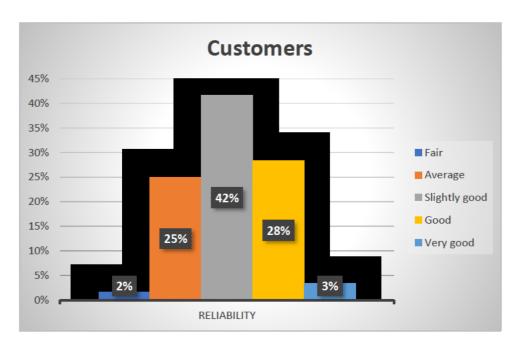


Figure 5.1: Customers' perceptions of Company A's service quality related to reliability

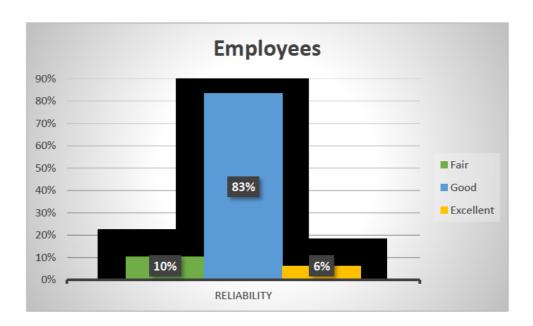


Figure 5.2: Employees' perceptions of Company A's service quality related to reliability

Baki et al. (2009) posit that reliability refers to the ability of the organisation to perform the service required and to do so without hesitation. They further state that customers want to be able to count on the organisation to perform as per their promises. The customer expects that the organisation will deliver the service accurately. The reliability dimension within the SERVQUAL model includes questions related to the accuracy of service, including delays; issues related to the possibility of frequent breakdowns. The findings of this study reveal that the majority of customers and employees interviewed claimed that the company is able to

perform the service required. It can be concluded that the majority of customers interviewed believed that the company is reliable and that reliability is in fact influencing their perception of service quality. Customers can rely on the company to meet their needs at promised times, to provide services that make it easier for customers to perform their jobs, to depend on the company's ability to provide customers with best possible solutions, to have the ability to effectively remedy supply chain problems, to provide customers with accurate transport and logistics solutions, and to accurately deliver service using the most advanced technology. This finding is aligned with a study conducted by Almomani, Nasseef, Bataine and Ayoub (2017) in Jordan, the Middle East, assessing service quality on guest loyalty in the hospitality industry. The study concluded that reliability was found to have a significant effect on customers' satisfaction levels. Furthermore, a study conducted on banks in Egypt by el Saghier and Nathan (2013) on service quality dimensions and customers' satisfaction claimed that reliability has been repeatedly found to be a highly significant factor in customer satisfaction.

# **5.5.** Research Objective 2: To ascertain whether responsiveness influence the perception of service quality

The responsiveness dimension, required respondents to rate Company A based on aspects such as promptness, lead times and willingness to help customers.

The majority of customers (40%) rated the company as "good" while others rated the company "slightly good" (28%) and the remaining (32%) rated the organisation as "very good". On the other hand, employees were split down the middle with half the respondents rating the company "good" and the other half rating the organisation as "excellent". The majority of customers rated the organisation above average when it came to their response to their needs. Given that 72% of the overall ratings fell within the higher intervals of the Likert scale, it can be deduced that customers are happy with the organisation's responsiveness, with room for improvement.

The employees of the organisation (100%) rated the organisation well above the average mark, with 50% rating the company "excellent" in this regard. When taking into consideration the entire dimension (responsiveness), the vast majority of employees (83%) rated the company as "good" with themes like the organisation's ability to meet customer needs and the organisation's ability to provide the best possible solutions being rated "excellent" (6%) by the employee respondents.

Both the customers and the employees' categories rated responsiveness\_4 the highest. This sub-dimension addresses the ability of the organisation's employee willingness and readiness to help customers. Figure 5.3 and 5.4 below refer:



Figure 5.3: Customers' perceptions of Company A's service quality related to responsiveness

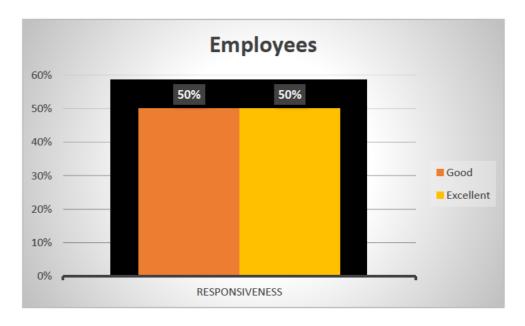


Figure 5.4: Employees' perceptions of Company A's service quality related to responsiveness

Baki et al. (2009) posit that responsiveness refers to the customers' assessment of service quality based on the speed at which the organisation will deliver the service. The speed at which the organisation delivers the service is based on the prompt, rapid and immediate delivery of

service (de Jager & du Plooy, 2007). The findings of this study reveal that the majority of the customers interviewed asserted that the company has been able to deliver quality service with appreciable speed, and promptness. It can be concluded that responsiveness is influencing the perception of service quality of the company as the majority of respondents claimed that the company responds promptly, the company allows last-minute requests and delivers the same quality, employees are always ready and willing to help customers, with prompt and accurate response to emergencies reported. This finding is aligned with the study conducted in Jordan by Almomani et al. (2017) which concluded that responsiveness was found to have a significant effect on customers' satisfaction levels.

# 5.6. Research Objective 3: To determine the extent to which assurance influences the perception of service quality

Customers and employees rated Company A based on aspects such as promptness, lead times and willingness to help customers. Under this dimension respondents also took into consideration whether Company A provides its employees with support that reassures customers their work is performed well.

The majority of customers (34%) rated the company as "good" while others rated the company "slightly good" (18%). An equal split was seen among the employees with half the respondents rating the company "good" and the other half rating the organisation "excellent". The majority of customers rated the organisation above average when it came to their response to their needs. Over ninety percent (90%) of all the ratings fell within the higher intervals of the scales, it can be deduced that customers are feel assured by the organisation's abilities.

The employees of the organisation (100%) rated the organisation well above the average mark, with 50% rating the company "excellent" in this regard. When taking into consideration the entire dimension (assurance), the vast majority of respondents (82%) rated the company above average with themes like the organisation "feeling free and safe" coming through from customers and themes like "politeness, providing adequate support and transparency" coming through from employees. Employees rated the company much higher than customers, meaning there could be a need to work out which areas need improvement here. Figures 5.5 and 5.6 below refer:

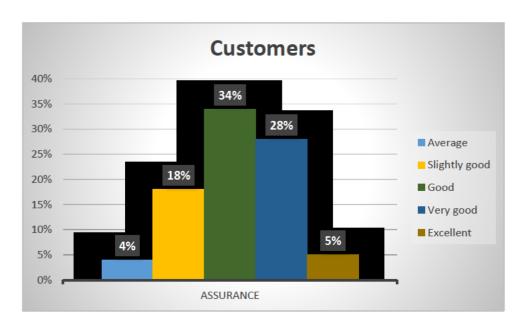


Figure 5.5: Customers' perceptions of Company A's service quality related to assurance



Figure 5.6: Employees' perceptions of Company A's service quality related to assurance

Baki et al. (2009) posit that assurance refers to the customers' expectation that the organisation knows exactly what they are doing and how they will deliver the service. The customer has confidence in the organisation and feels secure in their abilities to deliver the service. The findings of this study reveal that the majority of respondents (employees and customers) claim that the employees of the company are trustworthy in their dealings with customers, customers feel free and safe dealing with the employees, employees of the company are polite, somewhat transparent in showing customers how they deliver smart transport. It can be concluded that

assurance is influencing the customers in measuring service quality provided by the company. Customers made reference to all 5 sub-dimensions under assurance and used these to rate Company A's service quality. This finding is aligned with the study of Budi Setyawan, Supriyanto, Tunjungsari, Nurlaily Hanifaty and Lestari (2019) which concluded that assurance significantly influences perceptions of service quality. This study was conducted in Indonesia and assessed the quality of service of the medical staff in hospitals, and had patients rate their satisfaction using the SERVQUAL dimensions.

## 5.7. Research Objective 4: To establish the role empathy plays in influencing the perception of service quality

Here the respondents rated Company A customers and employees rated Company A based on the dimension titled "empathy". Some of the sub-dimensions addressed topics such as the organisation's attentiveness to customer needs and the ability of the organisation to tailor their services to the customer's specific needs.

Thirty-five percent (35%) of customers rated the company as being "very good" when it came to empathy. The first "excellent" rating by a customer was found in this category. Although the overall "excellent" rating formed only six percent (6%) of all the customer responses, it is the first time that Company A was rated at this level. The majority of customers (34%) rated the company as "good" while others rated the company as "slightly good" (18%). There was an equal split among the employees with half the respondents rating the company "good" and the other half rating the organisation "excellent". The majority of customers rated the organisation above average when it came to their response to their needs. Over ninety percent (90%) of all the ratings fell within the higher intervals of the ratings, it can be deduced that customers feel assured by the organisation's abilities.

Unlike with the previous dimensions, ninety-three percent (93%) of the employees rated empathy highly. However, six percent (6%) rated the company as average (fair).

Both the customer and the employee categories rated empathy relatively highly, but there is some room for improvement. Figure 5.7 and 5.8 below refer:

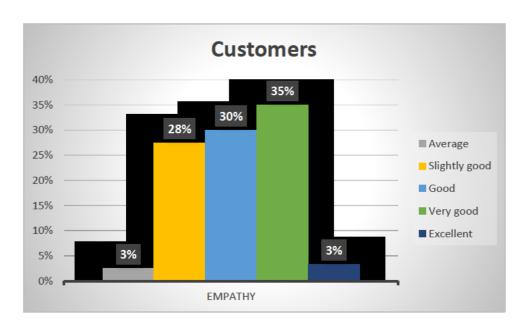


Figure 5.7: Customers' perceptions of Company A's service quality related to empathy

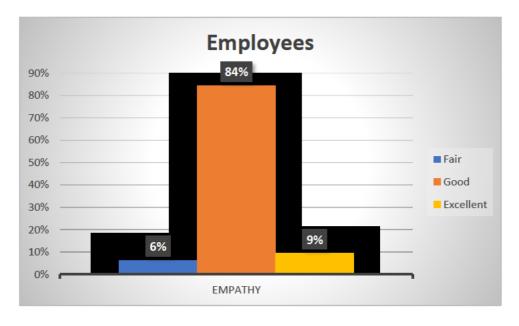


Figure 5.8: Employees' perceptions of Company A's service quality related to empathy

Baki et al. (2009) posit that empathy refers to the customer's perceived service quality, by way of concern for the individual. Here the customer is concerned with how much the organisation will individualise or customise their service to meet their requirements or specifications. Emphasis is placed on how the service was delivered, and how the customer felt when this took place. How the customer felt will determine how the customer perceives that organisation's service quality. The findings of this study reveal that the majority of respondents – both employees and customers – agreed that the customers are valued by the company, the company's employees understand their roles and attention is given to the needs of customers.

# 5.8. Research Objective 5: To determine whether tangibles influence the perceptions of service quality

Both respondent groups rated Company A on tangibility – the last dimension of the SERVQUAL model. This dimension considered the aspects such as physical facilities of the organisation and the types of technology that the organisation uses in delivering service quality. Other aspects included how well-presented the employees of the organisation are. Under this dimension respondents also took into consideration whether Company A provides its customers with flexible and technologically advanced transport solutions.

The majority of customers (32%) rated the company as "good" while others rated the company "very good" (18%). The employees' overall responses was dominated by a rating of "good", however 23% of the employees rated Company A as "fair" with regards to tangibility. The majority of customers rated the organisation above average when it came to their response to their needs. Contrary to the ratings provided regarding previous dimensions, this is the highest rating of "fair".

The majority of employees (78%) rated the organisation well above the average mark, with 25% of the ratings being "excellent". When taking into consideration all the responses relevant to tangibility, both employees and customers rated Company A highly.

With customer responses being the most positive, the ratings regarding tangibility indicate that Company A is meeting their needs in this regard. The Figures 5.9 and 5.10 below refer:

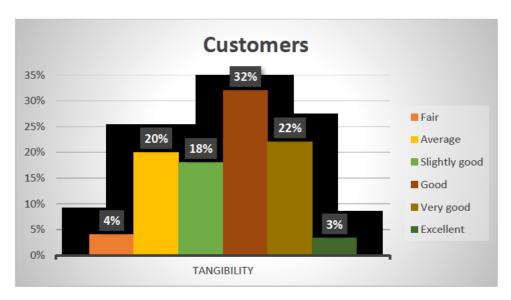


Figure 5.9: Customers' perceptions of Company A's service quality related to tangibility

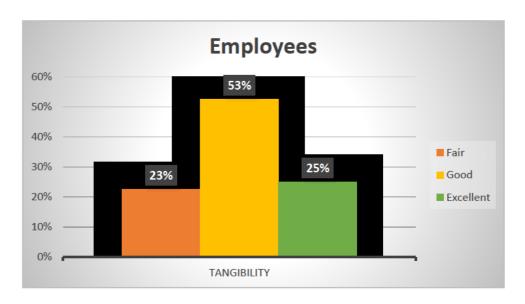


Figure 5.10: Employees' perceptions of Company A's service quality related to tangibility

Al-Neyadi, Abdallah and Malik (2018) and Budi Setyawan et al. (2019 posit that tangibles refer to the customer perceptions of service quality based on the physical appearances of the organisation. Here the customers assessed the physical appearance of the organisation and decided on its service quality on that basis. The findings of this study suggest that the employees claimed that the company uses the latest technologies to provide a high level of service quality to customers, while the majority of customers claimed that they cannot complain about the technology used by the company to provide a high level of service quality. The majority of both employees and customers claimed that the infrastructure of the company is appropriate throughout the company. Furthermore, the findings reveal that the majority of respondents, both employees and customers claimed that the employees are well presented and well dressed, the physical facilities are consistent with the type of service offered and that the company provides facilities that allow flexible and technologically advanced solutions. Based on the finding of this dimension, it can be concluded that the customer service quality perception is significantly influenced by this tangibles dimension, and this finding is aligned with the studies conducted by Budi Setyawan et al. (2019) and Al-Neyadi et al. (2018) which established that the tangibles dimension has a significant influence on service quality. Both studies were conducted in the healthcare industry and used the SERVOUAL dimensions to measure patients' satisfaction.

### 5.9. Summary of the findings

Table 5.1: Summary of study findings according to objectives and research questions

Objective 1:	Objective 2:	Objective 3:	Objective 4:	Objective 5:
To determine how reliability	To ascertain whether	To determine the extent to which	To establish the role empathy	To determine whether tangibles
influences the perception of	responsiveness influences the	assurance influences the	plays in influencing the	influence the perceptions of
service quality	perception of service quality	perception of service quality	perception of service quality	service quality
RQ1:	RQ2:	RQ3:	RQ4:	RQ5:
How does reliability influence	Does responsiveness influence	To what extent does assurance	Does empathy influence the	Do tangibles influence the
the perception of service quality?	the perception of service quality?	influence the perception of	perception of service quality?	perceptions of service quality?
		service quality?		
Finding 1:	Finding 2:	Finding 3:	Finding 4:	Finding 5:
The majority of customers and	The majority of the customers	The majority of respondents	The majority of respondents,	The majority of respondents,
employees interviewed claimed	interviewed asserted that the	(employees and customers)	both employees and customers	both employees and customers
that the company is able to	company is able to deliver	claimed that the employees of the	agreed that the customers are	claim that the employees are well
perform the service required and	quality service with appreciable	company are trustworthy in their	valued by the company, the	presented and well dressed, the
it can be concluded that the	speed and promptness. It can be	dealings with customers,	company's employees	physical facilities are consistent
majority of customers believed	concluded that responsiveness is	customers feel free and safe	understand their roles, attention	with the type of service provided.
that the company is reliable and	influencing the perception of	dealing with the employees,	is given to the needs of	Only the customers asserted with
that reliability is influencing their	service quality of the company as	employees of the company are	customers. However, some of the	confidence that the company
perception of service quality	the majority of respondents	polite, somewhat transparent in	respondents claimed that the	provides facilities that allow
	claimed that the company	showing customers how they	service is not tailored per	flexible and technologically
	responds promptly, and the	deliver smart transport. It can be	customer needs, while other	advanced solutions. Based on the
	company allows last minute	concluded that assurance is	respondents claimed that service	finding of this dimension, it can
	requests while delivering the	significantly influencing the	is tailored per customer. Based	be concluded that the customers'
	service at the same quality	customers in measuring service	on the findings, it can be	service quality perception is
		quality provided by the company.	concluded that the customers'	significantly influenced by this
			service quality perception is	tangibles dimension
			influenced by this empathy	
			dimension.	

Table 5.1 presents the findings of the study in relation to each of the objectives and research questions. The sections that follow include the recommendations based on the findings, the identified gaps, recommendations for future studies and the concluding statement.

#### 5.10. Recommendations Based on Results of the Study

The study findings supported the assertion that customers do, in fact, use these five dimensions to measure service quality. However, another aim of the study is to identify gaps that existed between customer perception of quality and that of the organisation. Meeting customer expectations is critical, and the study helped identify gaps between these two perceptions.

The following recommendations are made based on the study findings:

### 5.10.1. The Identified gaps related to reliability

The perception of service quality with regards to reliability showed some differences between the customer and employee groups. While the employees rated the organisation highly in this regard, the customers showed numerous "average" ratings in all five sub-dimensions. Fifty percent (50%) of the customers rated the organisations' ability to accurately deliver quality service through the use of the most advanced technology as below average. Given this, Company A should assess ways in which their accuracy and technology can be improved to better serve their customers. An improvement is necessary in order to align the view of the customers and the employees.

i. Reliability\_1: The ability of the organisation to accurately deliver quality service using the most advanced technology

The management and employees of the organisation should assess this closely. Initially, it is important for them to determine what customers specific expectations are regarding the accuracy of the service delivered. Some suggestions around technology and customers' expectations regarding how they expect these to be used to their advantage should be determined by the organisation. A study by Vivaldini, Pires and Souza (2012) in Brazil, investigated Logistics Service Providers (LSP) and ways that their services could be improved through technology. Implementation of such technologies could significantly improve quality of service. The establishment of an e-CRM (electronic Customer Relationship Management) system should be taken into consideration to best meet customer needs (Gurău 2003).

ii. Reliability\_3: The organisation's ability to effectively remedy supply chain problems faced by our organisation

Similarly, given that 40% of customers rated Company A as average in this category, it highlights that there is room for the organisation to improve. The organisation should assess their current approach and then find out how this can be better aligned to customer expectations.

Identifying what issues the customers have in this regard would better inform the organisation to assist them in developing a suitable remediation strategy. This will align expectations with the capabilities of the organisation, and ultimately minimise gaps between the customers' expectations and the quality of the delivered service.

### 5.10.2. The Identified Gap Related to Assurance

Of the sub-dimensions under assurance, 20% of customers gave an "average" rating regarding the organisation's transparency, while the employees rated this particular sub-dimension highly. The disconnect between these ratings means that there is a need for Company A to look into remedying it. The organisation needs to ensure that they determine the expectations and work towards meeting them.

i. Assurance\_5: The organisation is transparent in showing us how they deliver smart transport solutions, which reassure customers of the service

Sharing and transparency is necessary in order to reassure customers, and this will lead to customer satisfaction. The organisation should hold workshops or send out detailed communication when their systems or processes change (Moldabekova, Zhidebekkyzy, Akhmetkaliyeva & Baimukhanbetova, 2020). Open discussions with customers about how the organisation conduct their work or delivers their service would assist customers to feel assured. This will align customer expectations with service delivered by the organisation. Vivaldini et al. (2012) assert that the inclusion of technology increases the employees' skills as well as important information for customers and the organisation alike. The organisation should adopt initiatives such as sending out communication to clients when there are changes to the technologies or processes, especially to show improvement and the evolution of their services. Customers would appreciate being informed of the ways in which the service is being improved and receiving confirmation of the smart solutions that the company is

providing. This would work in both satisfying the quality aspect of the service delivered, but also in assuring customers that Company A has their best interest at the forefront of their service delivery. Finally, this will be an advantage given that assurance is in fact a dimension used by customers to measure service quality, and they will therefore determine Company A as meeting their expectations in this regard.

### **5.10.3.** The Identified Gap Related to Empathy

The perception of service quality relating to empathy showed a common theme between employees relevant to one of the sub-dimensions linked to the tailoring of services, where at least one respondent rated it "average".

i. Empathy\_3: The organisation is interested in tailoring their service to customers' specific needs and providing suitable solutions

"Customer needs vary, and companies can tailor their logistics systems to serve their customers better and more profitably" (Fuller, O'Conor & Rawlinson, 1993:88). Organisations should offer their customers a tailored service; in doing this Company A can ensure customer satisfaction. Some of the ways that this can be achieved is by employees of the organisation ascertaining what customers expect in terms of a tailored service and essentially providing a more tailored offering (Reay, 2021).

Given this, Company A should carefully consider some methods that will allow for more tailored offerings.

### 5.10.4. The Identified Gaps Related to Tangibility

Of the five dimensions assessed in this study, tangibility had the highest number of respondents rating Company A "average" and "fair". Both the customers and employees agreed that the organisation requires improvement in this regard.

A study conducted by Panda and Das (2014) confirms the importance of tangibility and its role in customer satisfaction. The concerning factor is that the rating of "average" can be identified in both categories, meaning that there is a need to address it as both customers and employees alike have identified a potential problem. This particular dimension addresses the physical facilities and its appropriateness to the industry within which Company A operates.

Company A should implement the ten-step approach to improve service improvement (Lai, Lau & Cheng, 2004b).

#### 5.11. Recommendations for Future Study

To generalise the results, a quantitative study with a large population is needed, particularly in the black-owned SMME community. Future research studies should study the gap between the expected and perceived service quality.

#### **5.12.** Concluding Statement

The purpose of this study was to explore the dimensions of SERVQUAL that influence customer perceptions of service quality which Company A could use in improving their service quality. The study measures the five dimensions of SERVQUAL namely reliability, responsiveness, assurance, empathy, tangibles.

The findings of this study reveal that all attributes of the five dimensions of SERVQUAL were influencing the perception of service quality. Furthermore, there was not a major difference between the employees' responses to the five dimensions and the customers' responses about the five dimensions of SERVQUAL. However, Company A can use these findings to improve the way in which they manage quality within the organisation. The company's management team can also use these findings to better align the customers' expectations with their provision of service. The gaps identified and the recommendations relevant to that will also guide the company in matching, and even surpassing customer expectations, resulting in continuous success.

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#### **APPENDICES**

**Appendix A: Letter of Consent** 

<u>University of KwaZulu-Natal</u>

**School of Management** 

Informed Consent

**Document** 

I, Nontsikelelo Mdiniso, am a Masters student at the University of KwaZulu-Natal, Pietermaritzburg campus. My study focuses on the management of quality within the Transportation and Logistics industry. The management of quality within an organisation plays an integral role in the performance of an organisation. With this in mind, a critical analysis of the Quality Management System will enable the

identifying of weaknesses in the current processes and assist in establishing

improvements. The topic to be studied as follows:

"A Critical Analysis of Quality Management Systems: A Logistics Perspective."

Please note that this investigation is being conducted for pure academic purposes in fulfilment of the requirements for the completion of the Masters in Commerce degree. My supervisor is Dr Hans Salisbury and he is based in the School of Management on the Pietermaritzburg campus of the University of KwaZulu-Natal. He can be contacted at <a href="mailto:Salisbury@ukzn.ac.za">Salisbury@ukzn.ac.za</a> or telephonically at (033) 260 5458.

Should you need to contact me regarding any aspect of this research, you can do so at nontsim@gmail.com or telephonically on 079 260 5269.

Information gathered in this study will include data retrieved from the interview/survey that I request you to participate in. Please note that only summary data will be included in the report and that your name will not be included. Your anonymity and confidentiality is of utmost importance and will be maintained throughout the study.

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Your participation in the study is completely voluntary and you are under no obligation totake part in an interview/survey. You also have the right to withdraw at any time during the study.

I appreciate the time and effort it will take you to participate in this study. I would highlyappreciate your participation, as it would help me in my research endeavours.

### Please complete the section below:

	I(Full names of participant)
here	eby
	confirm that I understand the contents of this document and the nature of
	the researchproject, and I consent to participating in the research project.
shou	I understand that I am at liberty to withdraw from the project at any time, ald I so desire.
	This interview may /may not be recorded. [Delete which is not applicable]
	Signature of Participant
	Date

### **Appendix B: Employee Interview Guide**

#### **INTERVIEW GUIDE**

Date:	
Office/Depot:	
Capacity:	
Date of interview:	

#### **INTRODUCTION**

The purpose of the study will be explained and confidentiality discussed. It will be explained that notes will be taken during the interview. Permission to use audio recorder will be requested.

#### RELIABILITY

- 1. How do you rate the company's ability to accurately deliver quality service using the most advanced technology on a scale of 1 to 5?
- 2. On a scale of 1 to 5, how is the organisation able to provide customers with accurate transport and logistics solutions within promised time-frames?
- 3. On a scale of 1 to 5, does the organisation possess the ability to effectively remedy supply chain problems faced by the customer?
- 4. On a scale of 1 to 5, is the organisation dependable in providing the best possible solutions to its customers, and does this result in successful, measurable outcomes for the customer?
- 5. On a scale of 1 to 5, does the organisation provide services that make it easier for the customer to perform their jobs?

6. On a scale of 1 to 5, does the organisation meet the needs of the customers at promised times, resulting in the ability of customers to meet their own customers' needs?

#### RESPONSIVENESS

- 1. On a scale of 1 to 5, does the organisation respond to customer requests promptly and within promised lead times?
- 2. On a scale of 1 to 5, does the organisation allow for last minute requests from customers and still deliver the same level of quality?
- 3. On a scale of 1 to 5, does the organisation respond promptly to requests that customers have sent through?
- 4. On a scale of 1 to 5, are the organisation's employees always ready and willing to assist customers?
- 5. On a scale of 1 to 5, is the organisation's response to a customer emergency prompt and accurate?

### **ASSURANCE**

- 1. On a scale of 1 to 5, would you say the organisation's employees are trustworthy, honest and transparent in their dealings with customers?
- 2. On a scale of 1 to 5, do your customers feel free and safe when transacting with the employees within the organisation?
- 3. On a scale of 1 to 5, are the employees within the organisation polite, making it easy for customers to conduct their business?
- 4. On a scale of 1 to 5, does the organisation provide adequate support to employees within the organisation, in a way that allows them to perform their work in a manner that is reassuring to customers?
- 5. On a scale of 1 to 5, does the organisation provide transparency in showing customers how they deliver smart transport solutions, in a way that is reassuring to customers?

#### **EMPATHY**

- 1. On a scale of 1 to 5, would you say customers feel valued by the organisation?
- 2. On a scale of 1 to 5, do you think your customers perceive themselves as known bythe organisation, and would customers agree that the organisation understands their job of how to best assist them?
- 3. On a scale of 1 to 5, is the organisation interested in tailoring services to meet the specific needs of the customers, and to provide suitable solutions?
- 4. On a scale of 1 to 5, does the organisation give attention to the needs of the customers, and make communication simple for them?

#### **TANGIBILITY**

- 1. On a scale of 1 to 5, does the organisation use the latest technologies to provide a high level of service quality to its customers?
- 2. On a scale of 1 to 5, does the organisation's infrastructure look appealing to customers, and does it remain consistent throughout the organisation?
- 3. On a scale of 1 to 5, are the organisations employees well-presented and well-dressed?
- 4. On a scale of 1 to 5, are the physical facilities of the organisation consistent withthe type of service industry in which it operates?
- 5. On a scale of 1 to 5, does the organisation provide facilities that allow them to provide flexible and technologically advanced transport solutions?

THANK YOU FOR YOUR PARTICIPATION.

RESPONDENTS MAY WITHDRAW THEIR

PARTICIPATION AT ANY TIME SHOULD THEY SO WISH.

### **Appendix C: Customer Survey**

### **CUSTOMER SURVEY QUESTIONNAIRE**

	CUSTOMER SURVEY	LOW								HIGH
	The ability of the organisation to accurately deliver quality service using the most advanced technology	1	2	3	4	5	6	7	8	9
	2. The organisation's ability to provide me with accurate transport and logistics solutions, within promised time-frames	1	2	3	4	5	6	7	8	9
RELIABILITY	3. The organisation's ability to effectively remedy supply chain problems faced by our organisation	1	2	3	4	5	6	7	8	9
	4. The organisation's dependability in providing us with the best possible solutions that will result in successful measurement outcomes	1	2	3	4	5	6	7	8	9
	5. The organisation provides services that make it easier for us to perform our jobs	1	2	3	4	5	6	7	8	9
	6. The organisation's ability to meet the needs of our organisation at promised times, resulting in meeting our own customer's needs	1	2	3	4	5	6	7	8	9

RESPONSIVENESS	7. The organisation responds to requests from us promptly and within promised lead times	1	2	3	4	5	6	7	8	9
	8. The organisation will allow last minute requests from us and deliver the same (usual) quality	1	2	3	4	5	6	7	8	9
	9. The organisation will respond promptly to requests sent through by us	1	2	3	4	5	6	7	8	9
	10. The organisation's employees are always ready and willing to help us	1	2	3	4	5	6	7	8	9
	11. The organisation's response to an emergency is prompt and accurate	1	2	3	4	5	6	7	8	9
	12. The organisation's employees are trustworthy, honest and transparent in their dealings with us	1	2	3	4	5	6	7	8	9
	13. I feel free and safe when transacting with the employees from the organisation	1	2	3	4	5	6	7	8	9
NCE	14. The politeness of employees within the organisation is high and this makes doing business easy	1	2	3	4	5	6	7	8	9
ASSURANCE	15. The organisation provides employees with adequate support which allows them to perform their work assuring us	1	2	3	4	5	6	7	8	9
	16. The organisation is transparent in showing us how it delivers smart transport solutions, which assures us of service quality	1	2	3	4	5	6	7	8	9

	17. The organisation values me as a client	1	2	3	4	5	6	7	8	9
THY	18. The organisation knows me and my team and understands their job in how to best assist us	1	2	3	4	5	6	7	8	9
ЕМРАТНУ	19. The organisation is interested in tailoring its service to our specific needs and to provide suitable solutions	1	2	3	4	5	6	7	8	9
	20. The organisation pays attention to our needs and makes communicating with them simple	1	2	3	4	5	6	7	8	9
	21. The organisation uses the latest technologies to provide a high level of service quality to us	1	2	3	4	5	6	7	8	9
	22. The organisation's infrastructure is appealing and consistent throughout the organisation	1	2	3	4	5	6	7	8	9
TANGIBILITY	23. The organisation's employees are very well presented and well-dressed	1	2	3	4	5	6	7	8	9
TANG	24. The appearance of the physical facilities are consistent with the type of service industry in which the organisation operates	1	2	3	4	5	6	7	8	9
	25. The organisation provides facilities that allow flexible and technologically advanced transport solutions	1	2	3	4	5	6	7	8	9

#### Appendix D: Ethical Clearance Approval



08 September 2020

Miss Nontsikelelo Mdiniso (213573223) School Of Man Info Tech &Gov Pietermaritzburg Campus

Dear Miss Mdiniso,

Protocol reference number: HSSREC/00001729/2020

Project title: A Critical Analysis of Quality Management Systems: A Logistics Perspective

Degree: Masters

#### Approval Notification – Expedited Application

This letter serves to notify you that your application received on 15 July 2020 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted FULL APPROVAL

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

#### This approval is valid until 08 September 2021.

To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane Hlalele (Chair)

/dd

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Tel: +27 31 260 8350 / 4557 / 3557
Webelte: http://research.ukzn.ac.za/Research-Ethics/

Founding Campuses: Edgewood

Howard College

Medical School

Pietermaritzburg

Westville

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