

**TOTAL QUALITY MANAGEMENT: A STRATEGY FOR ACHIEVING
ORGANISATIONAL PERFORMANCE AND COMPETITIVE ADVANTAGE.**

A CASE STUDY OF INTERCITY STC COACHES LIMITED

By

Dorinda Tham Bsc. Natural Res. Mgt (Hons.)

A Thesis submitted to the Department of Marketing and Corporate Strategy,

Kwame Nkrumah University of Science and

Technology

in partial fulfillment of the requirements for the degree

of

MASTER OF BUSINESS ADMINISTRATION

(Strategic Management & Management Consulting)

School of Business

College of Arts and Social Sciences

November 2009

DECLARATION

hereby declare that this submission is my own work towards the MBA and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University except where due acknowledgement has been made in the text.

DORINDA THAM (PG1645607)

.....
Student Name & ID



.....
Signature

14-10-09

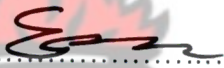
.....
Date

KNUST

Certified by:

MR. ERIC FOSU OTENG-ABAYIE

.....
Supervisor(s) Name



.....
Signature

15-10-2009

.....
Date

Certified by:

MR. SAMUEL YAW AKOMEA

.....
Head of Dept. Name



.....
Signature

15-10-2009

.....
Date



DEDICATION

To the Almighty God whose ways man cannot comprehend and whose actions are a mystery to the cleverest of human minds.

KNUST



ABSTRACT

The purpose of this study is to identify and assess the implementation of eleven critical elements of total quality management (TQM) and to determine whether these elements are associated with the quality of service delivery and customer satisfaction in the Ghanaian road transport industry. The company that was used as a case study was Intercity STC Coaches Limited. Primary data for this study was collected through unstructured interviews and with the aid of self-administered questionnaires to top management of Intercity STC Coaches Ltd. In addition to this, the five dimensions of the SERVQUAL model were adopted in determining the quality of service delivery by conducting a customer satisfaction survey. The results revealed that all 11 critical elements existed in the implementation of TQM. However variability in implementation of these elements existed. The findings indicate that more than half of the respondents who participated in the customer satisfaction survey had a good perception of the quality of service delivery of Intercity STC Coaches Ltd. However, only obsession with quality and unity of purpose and employee involvement and empowerment had a positive association with the quality of service delivery. The customer satisfaction survey did not cover the entire branches of Intercity STC Coaches Ltd. but was restricted only to the Head office in Accra. This affects the degree to which findings from this study can be generalized. However, multiple cases can be considered in future studies to allow for generalization of findings to the road transport industry. Nonetheless, this study contributes significant knowledge to TQM literature and Intercity STC Coaches Ltd (Ghana) as the findings will guide management in aligning TQM efforts towards the fulfillment of current and potential customer needs for a competitive advantage.

ACKNOWLEDGEMENT

All thanks goes to the Almighty God who is my wisdom and vision. I wish to express my sincerest gratitude to my supervisor, Mr. Eric Fosu Oteng-Abayie for his time, constructive criticisms and suggestions, through which this study has been undertaken successfully.

The commitment, sacrifice and unwavering support of my parents and siblings have given me the opportunity to pursue this degree. I really appreciate your immense support and prayers. God bless you and keep you always.

The opportunity to work with the management and customers of Intercity STC Coaches Ltd. has been challenging and yet fulfilling. My sincerest appreciation goes to Mr. Adjei Sefa for permitting me to use the company as a case study. Secondly, my heartfelt gratitude goes to Mr. Tony Safo for his time, assistance and collaboration throughout the entire period of this study. To all the staff of Intercity STC Coaches Ltd. especially Auntie Rosaline and all the staff at the help desk, I say thank you very much for making this study possible. It has been a pleasure working with you.

Last, but not the least, my appreciation goes to all colleagues who assisted in the design and pilot test of the customer satisfaction questionnaire and in diverse ways contributed to this study. God richly bless you!

TABLE OF CONTENTS

CONTENT	PAGE
Declaration	ii
Dedication	iii
Abstract	iv
Acknowledgement	v
Table of Contents	vi
List of Tables	viii
List of Figures	ix

CHAPTER ONE - INTRODUCTION

1.1 Background of Study	1
1.2 Research Problem	3
1.3 Objectives of the Study	4
1.4 Research Question	4
1.5 Relevance of the Study	5
1.6 Scope of the Study	6
1.7 Organization of the Study	7
1.8 Limitations of the Study	7

CHAPTER TWO - LITERATURE REVIEW

2.1 Introduction	8
2.2 History of Total Quality Management	8
2.3 Total Quality Management	9
2.4 Elements of Total Quality	10
2.4.1 Strategically Based	11
2.4.2 Customer Focus	12
2.4.3 Obsession with Quality	13
2.4.4 Scientific Approach	14
2.4.5 Long Term Commitment	15
2.4.6 Teamwork	16
2.4.7 Continual Process Improvement	16
2.4.8 Education and Training	17
2.4.9 Freedom through Control	18
2.4.10 Unity of Purpose	19
2.4.11 Employee Involvement and Empowerment	19
2.5 Quality Defined	21
2.5.1 Service Quality	22
2.5.2 Dimension of Service Quality	23
2.5.3 Importance of Service Quality	26
2.6 Organizational Performance	27
2.7 Customer Loyalty	28
2.7.1 The Relationship between Customer satisfaction and Loyalty	29
2.8 Competition	30
2.8.1 Competitive Advantage	32

2.8.2 The Relationship between Quality and Performance	34
--------------------------------------------------------	----

CHAPTER THREE - RESEARCH METHODOLOGY

3.1 Introduction	36
3.2 History of Intercity STC Coaches Ltd.	36
3.2.1 Company Profile	36
3.2.2 Passenger Bus Service Routes	37
3.2.3 Company Vision and Mission Statement	37
3.2.4 Key Corporate Objectives	37
3.3 Sample Size Determination and Sampling Techniques	38
3.3.1 Description of the sample	39
3.4 Questionnaire Design	41
3.5 Method of Data Collection	41
3.6 Method of Data Analysis	42
3.6.1 Reliability of Questionnaires	42

CHAPTER FOUR - DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction	44
4.2 Demographic Characteristics of Respondents	44
4.3 Customer Choice and Loyalty	46
4.3.1 Critical factors	48
4.4 Dimensions of the SERVQUAL Model	50
4.4.1 Evaluation of Responsiveness and Reliability	51
4.4.2 Evaluation of Tangibles	54
4.4.3 Evaluation of Assurance and Empathy	56
4.5 Overall Quality of Service Delivery	59
4.5.1 The Need for Improvement	61
4.6 Competition	62
4.7 Critical Elements of TQM	64
4.7.1 Assessment of Education and Training and Scientific Approach	65
4.7.2 Assessment of Obsession with Quality and Customer focus	66
4.7.3 Assessment of Employee Involvement and Participation....	67
4.7.4 Assessment of Unity of Purpose and	67
4.8 Impact of TQM Elements on service quality	68

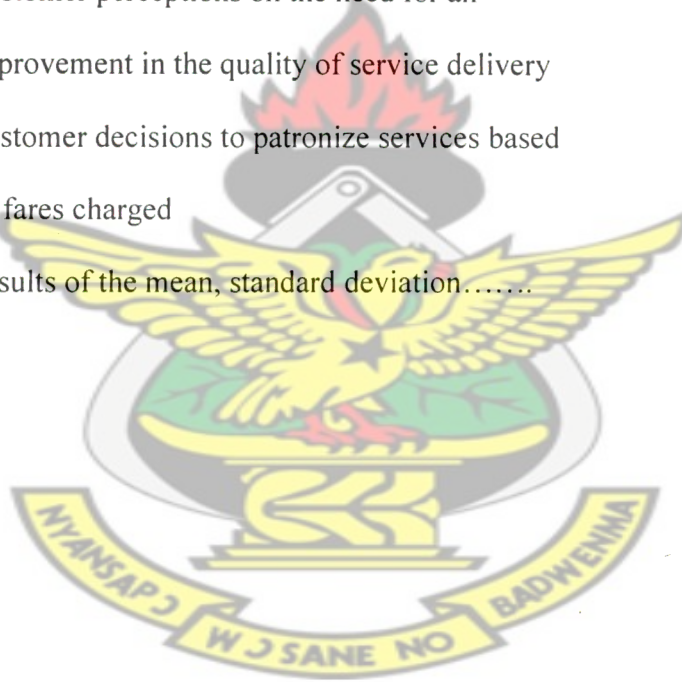
CHAPTER FIVE- SUMMARY OF FINDINGS, RECOMMENDATIONS & CONCLUSION

5.1 Introduction	70
5.2 Summary of Findings	70
5.3 Recommendations	72
5.4 Conclusion	74

REFERENCES	76
Appendices	85

LIST OF TABLES

TABLE		PAGE
Table 3.1	Respondents traveling to the six routes.	38
Table 3.2	Reliability of the SERVQUAL construct	42
Table 3.3	Reliability of TQM critical elements	43
Table 4.1	Demographic characteristics of respondents	44
Table 4.2	The number of times respondents travel within a year	45
Table 4.3	Customer loyalty and patronage	48
Table 4.4	Mean, standard deviation and coefficient of variation of the SERVQUAL dimensions	51
Table 4.5	Customer perceptions on the need for an improvement in the quality of service delivery	61
Table 4.6	Customer decisions to patronize services based on fares charged	64
Table 4.7	Results of the mean, standard deviation.....	65



LIST OF FIGURES

FIGURE		PAGE
Figure. 4.1	Reasons for using Intercity STC's passenger bus service	49
Figure 4.2	Customer perception on prompt departure	52
Figure 4.3	Customer perceptions of the quality of service delivery	60
Figure 4.4	Competitors of Intercity STC Coaches Limited	62



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In Ghana, road transport is the predominant mode of transportation and for that matter, accounts for 94% of freight and 97% of passenger travel (IMF, 2007). Moreover entry into the public transportation field is unrestricted, and this has led to expansion of this industry by competitors, resulting in increased competition in this sector of the industry (www.gipc.org.gh, accessed on 9th Feb 2009). Although there is an alternative means of travel such as air, this is limited to certain regions in the country. Ghana has one international (Kotoka in Accra) airport, four regional ones and a number of airstrips scattered over the country (MCI, 2008). The absence of barriers to entry within the road transport sector, poses a huge threat and challenge to existing companies operating within this sector.

In the road transport sector, where the differences in services offered and prices charged are relatively low, customers can switch to other transport providers with relative ease. Another challenge that organizations face is the relative ease with which strategies are mimicked (Thompson *et. al.*, 2005). This calls for the implementation of sustainable strategies that will allow organizations to remain competitive, in their effort to survive and remain profitable.

According to Yasin *et. al.*, (2004), increased customer sophistication and the globalization of business activities are forcing business organizations to re-engineer their cultures, operations and systems to support customer-focused and quality-driven competitive business strategies. This means that organizations cannot do things the

way they used to in the past and expect to stay ahead. In order to compete, they must improve continually (Goetsch and Stanley, 2006).

In addition to this, companies must implement unique strategies that would have an impact both in the marketplace and internally, thereby giving consumers reason to prefer its products and services over competitors (Thompson *et. al.*, 2005). According to Huq (2006), numerous studies suggest that quality is an important competitive advantage that leads to improvement in performance (Belohlav, 1993; Wruck and Jensen, 1998; Huq, 1995). This has very significant implications for organizations that are striving to achieve service quality, because such failure by management to interpret customer desires accurately can result in loss of business and possible bankruptcy for some (Gupta *et. al.*, 2005). On the other hand, those who provide customers with quality services can have a stronger competitive position in today's dynamic marketplace (Pun and Ho, 2001).

According to Lindner (1998), quality improvement, in particular Total Quality Management (TQM) as gained interest in recent years. For most of the 20th century, productivity was the primary emphasis for most profit and non-profit organizations; the emphasis, however, is now changing to quality. The reason is simple; neither price or technology, nor quantity is sufficient to differentiate products or services from the competition. On the other hand, one thing that attracts and keeps customers is the "extra value" of quality - as defined by the customer (Smith, 1999). Moreover, today's managers recognize that improving quality in all areas of their businesses improves customer satisfaction and increases customer loyalty. However, integration of quality

on a functional basis to properly meet and exceed the needs of customers still remains a major challenge to organizations (Davis *et. al.*, 2003).

Although a number of studies have been undertaken in the area of quality management with emphasis on Total Quality Management, studies within service industries with particular focus on the road transport sector in Ghana is relatively limited. This study therefore examines the implementation of TQM as a strategy in the road transport sector and seeks to identify how it affects the quality of service delivery and customer satisfaction in an attempt to gain competitive advantage in the transportation industry.

1.2 Statement of the Problem

The increase in competition in the road transport sector and the challenge to meet the constant demand of customers threatens the sustainability of a firm's competitive advantage in the marketplace (Wit *et. al.*, 2005). Over the past few years the road transport sector has expanded introducing companies such as Metro Mass Transit Limited, "Mplaza", "O.A. travel and tours and Great Imperial Express" just to mention a few. This has resulted in keen competition and a struggle for survival and customer retention among these companies. Wit *et. al.*, (2005), suggests that all these developments can undermine the fit between the firm's competitive advantage and the environment, weakening the firm's position.

The challenge companies are facing is how to maintain and expand their customer base to remain competitive in the midst of increasing competition. Services offered among road transport operators are similar and switching cost is relatively low,

therefore it is easy for passengers to change services based on price. However, in recent years, quality has become an important competitive strategy in the global market (Metri, 2006). Therefore, it is important for road transport operators to incorporate quality into their strategies and services to distinguish themselves from their competitors and attract and retain customers.

1.3 Objectives of the Study

The purpose of this study is to;

- To measure the quality of service delivery based on customer satisfaction.
- To identify and assess the implementation of the critical elements of TQM in Intercity STC Coaches Ltd.
- To determine which critical elements impact the quality of service delivery.
- To recommend areas of service delivery and total quality management that can enhance customer satisfaction.

1.4 Research Questions

- What is the perception of customers on the quality of service delivery offered by Intercity STC Coaches Limited?
- What critical elements of Total Quality Management are being implemented in Intercity STC Coaches Limited?
- What influence does Total Quality Management have on organizational performance (Customer satisfaction)?
- What areas of service delivery and Total Quality Management should Intercity STC Coaches Ltd. focus on to improve customer satisfaction?

1.5 Relevance of the Study

Although the service sector still faces quality problems such as long waiting hours in restaurants for food that may be cold or poorly prepared and improperly cleaned hotel rooms, the service sector continues to improve quality as competition heats up and organizations seek new competitive advantages (Longnecker and Scazzero, 2000). However, how to maintain competitive advantage while maintaining stable business operations has become a critical factor for survival.

Competition has set new standards of quality and thus the need for a total commitment to quality at every level of industry, beginning with top management. Total quality management is a philosophy in which the instinct for improvement pervades the whole company (Goetsch and Stanley, 2006). According to Prajogo and Sohal (2003), the principle of customer focus encourages organizations to consistently search for new customer needs and expectations, and therefore, leads organizations to be innovative in terms of developing and introducing new products as a continual adaptation to the market's changing needs (Juran, 1988). Likewise, continuous improvement encourages change and creative thinking in how work is being organized and conducted. This implies that although the same services are being offered by different companies, these principles will differentiate the quality of services being offered by firms that adopt them (Prajogo and Sohal, 2003).

By practicing total quality management an organization will be able to create a differential of excellence which sets the company apart (Macdonald *et. al.*, 1992). The findings from this research will be helpful to business and organizations who are struggling to keep up with change in this fast paced economy. It will provide Intercity

STC Coaches Limited with an in-depth understanding of Total quality management and how it can be used as a tool to meet customer requirements and perform better than their competitors. It will also help the company improve the quality of service delivery; enhance customer satisfaction and ultimately, customer loyalty and subsequently profitability, thus creating a competitive edge for the company. Finally, as the pioneering work in Ghana, it will provide a useful guide for academic reference for further study.

1.6 Scope of the Study

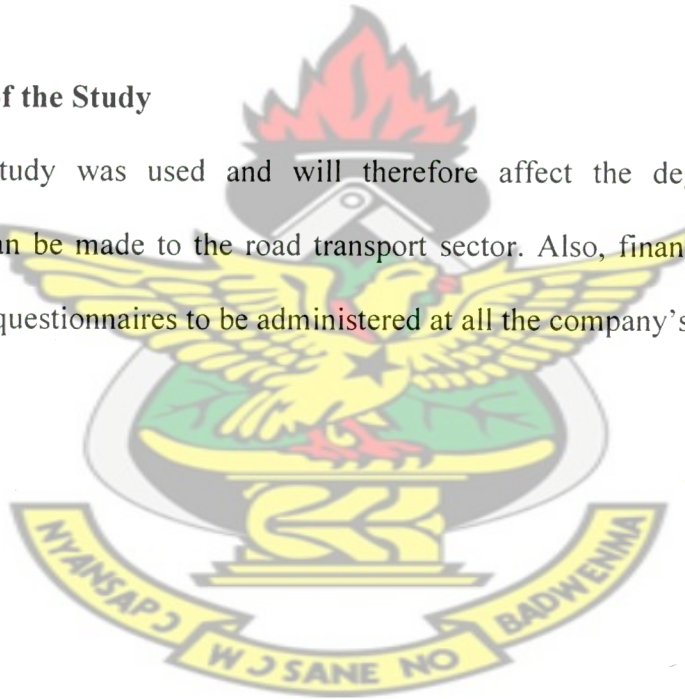
The study will be undertaken over a period of three months. The scope of the study is limited to how the critical elements of total quality management can be used as a strategic tool to improve the quality of service delivery and consequently customer satisfaction in order to create a competitive edge in the road transport sector. For the purpose of this study, the road transport sector is referring to transport providers who travel between the regions of Ghana and across the Ghanaian border. It does not include transport providers who travel short distance within regions. The case study for this project is Intercity STC Coaches Limited, Accra. The study will focus on the external customers of the company, with emphasis on customers who use the company's passenger bus service and top management. Also, out of the company's many services provided, the focus of the study will be limited to its passenger bus service. For the purpose of this work, customer satisfaction will be used as a measure of organizational performance.

1.7 Organization of the Study

The study would be organized into five chapters. Chapter one, introduces the study, examines the problem statement and goes further to state the research objectives and questions. This chapter also includes the significance, scope, limitations and organization of the study. Chapter two contains a review of various literatures relating to the study. Chapter three focuses on the research design and methodology adopted for this study. In addition, it provides a brief detail of the data analysis used for the study. Chapter four provides a detailed analysis of the findings from the questionnaires administered and finally, chapter five presents a summary of the findings as well as the recommendations and conclusion of the study.

1.8 Limitations of the Study

A single case study was used and will therefore affect the degree to which generalizations can be made to the road transport sector. Also, financial constraints did not allow for questionnaires to be administered at all the company's branches.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter contains a detailed review of literature based on the relevance of the topic being studied. It draws on the findings from journals, magazines, text books and other sources of literature. This chapter also serves as a guide in answering the research objectives of this study.

2.2 History of Total Quality Management

The development of Total Quality Management dates back to the efforts of Frederick Taylor in the 1920s to evaluate and improve the quality of manufactured goods. Following Taylor's efforts, the next major improvement came with the introduction of statistical quality control procedures as pioneered by the Bell Telephone Labs in the 1940s. This led to the beginning of Edward Deming's work with quality assurance and a focus on continuous improvement and the elimination of waste (Smith, 1999). However, what has become known as TQM today, has been the contribution of several quality pioneers such as: Joseph Juran, Edward Deming, Philip B. Crosby, Genichi Taguchi, Kaoru Ishikawa, Armand V. Feigenbaum, Peter Scholtes and Walter Shewhart, just to mention a few (Petersen, 1999).

Formally known as total quality control, the name "Total Quality Management" was coined by the U.S. Navy in 1985 (Richardson, 1997). The idea behind TQM is that much can be achieved by innovation, but competitive advantage is largely affected by continuous process improvement (Smith, 1999). Whilst it is acknowledged that TQM is not a clear-cut concept, TQM is generally understood as an integrated organization

strategy for improving product and service quality (Joiner, 2007). Warren (2002) suggests that TQM is a structural system for creating organization-wide participation in planning and implementing a continuous improvement process that exceeds customer expectations.

2.3 Total Quality Management

TQM essentially differs from traditional quality management approaches as it embodies a different perception of what quality is and how we define it; new appreciation of the impact of quality on productivity, cost and competitiveness; different view of who is responsible for quality and new understanding of how we achieve quality (Hames, 1991).

In spite of the numerous contributions towards the development of total quality management, one commonly accepted definition of total quality management has not been arrived at (Vinzant and Vinzant, 1996). It has been variously defined as “a philosophy of management that strives to make the best use of all available resources and opportunities by constant improvement” (Hales, 1991); a strategic action that focuses on managing the total organization to provide clients with products or services that satisfy them, through the mobilization of the individuals, management leadership and the cohesion of all the resources of the firm (Escrig-Tena, 2004).

Regardless of these different definitions that have been put forward, the focus behind each one is the need for improvement of a product, service or process with the sole aim of achieving customer satisfaction and invariably profitability. Total Quality can be described as a customer focused improvement process; a strategy for business

success involving every employee within the organization (Richardson, 1997). This requires participation of everyone in the company in the development of shared mission, vision, plans and in the quest for continuous improvement. Employees must, therefore, become management's partners in meeting the ultimate goal of delighting the customers. Such partnerships will require concerted efforts towards the acquisition of knowledge and skills in meeting day-to-day problems and making fast but low-risk decisions (Gatchalian, 1997).

The Japanese have invented and adopted many managerial techniques; to name a few would include just-in-time inventory control, flexible manufacturing systems, the emphasis on customer service (both internal and external customers), and a change in the way people work which emphasizes teamwork, training and greater employee responsibility and involvement in the work process. These are all related devices aimed at reorienting the production process so that it delivers products and services of consistent quality, in a timely fashion to meet customer requirements (Patel, 1995).

2.4 Elements of Total Quality

McAdam and Henerson (2004) define TQM as embodying the following constructs:

- TQM is strategically linked to the organizational goals.
- Customer satisfaction and understanding is vital within the organization.
- Employee participation and understanding at all levels is required within the organization.
- There is a need for management commitment and consistency of purpose within the organization.

- The organization is perceived as a series of processes, which incorporate customer supplier relationships.

Similarly, Khan (2003) suggests that, the core of the TQM philosophy is absolute customer focus, although “employee empowerment, involvement and ownership”, “continuous improvement” and the “use of systematic management” help the organization achieve continual increase of customer satisfaction at a continually lower real cost. However, Goetsch and Stanley (2006) elaborate these features in eleven critical elements; strategically based, customer focus, obsession with quality, scientific approach, long term commitment, teamwork, continual process improvement, education and training, freedom through control, unity of purpose and employee involvement and empowerment.

2.4.1 Strategically-based

According to Goetsch and Stanley (2006), “the strategic plan of a total quality organization is designed to give it a sustainable competitive advantage in the marketplace; therefore, it should include a vision, mission, broad objectives and activities that must accomplish these objectives. However, as with all strategies, the implementation of TQM involves profound changes in culture in that they require organizations to adopt markedly different styles of thinking and values. The values of TQM emphasize democracy and teamwork, ongoing improvement and attention to quality, and an emphasis on customer satisfaction”.

“However, implementation depends on the extent to which existing organizational culture can be changed to accommodate its values. A culture that is quality and

customer focused is the glue that connects and combines all components of TQM toward the final goal of achieving competitive advantage. Understanding that “culture is the values, beliefs, and norms that guide behavior in organizations” (Reed et al., 2000) and then using it to instill and reward behaviors that contribute to quality and customer satisfaction is key. Culture is also necessary for providing employee empowerment that guides employees to focus on quality and inspect their own mistakes” (Ahire et al., 1996).

2.4.2 Customer Focus

According to Satish and Ranaganathan (2008), customers have expectations from an organization which they patronize. If those expectations are not met, they get dissatisfied, and stop patronizing the organization. Studying the profitability of 472 restaurants, Bernhardt et. al., (1994) reported that customer satisfaction data collected at any point in time were directly related to restaurant profits nine months later. Similarly, studying a diverse group of firms, Anderson et. al., (1993) reported that customer perceptions of quality were positively related to return on investment. Eklof and Westlund (1998) point out to the fact that customer satisfaction is effective in quality management and it has the most important role while implementing TQM.

Metri (2006) suggests that it is a mistake to presume that services offered at present can keep an organization solvent and ahead of competition, because customer needs are always changing. Organisations are therefore responsible in maintaining a high level of excellence and value to their customers.

Total quality emphasizes the importance of the customer; both external and internal, as the driving force for quality. Whereas external customers define the quality of

products and services delivered, internal customers, who are the employees, define the quality of people, processes and environment associated with these products and services (Goetsch and Stanley, 2006).

According to Khan (2003), “delighted customers are the prime determinant of sustainable competitive advantage for any organization. To retain customers and entice new ones, a company needs to focus on providing value to the customer in a manner that is more effective than that of its competitors. Eventually, customer satisfaction will transform into customer delight when goods or services exceed customers’ expectations. For that reason, understanding what the customer wants is crucial to the success of any business”.

Directing all efforts towards this goal leads to higher sales and operating profits for the company as customers pay and buy more of a quality product or service. When care is also taken to satisfy the requirements of internal customers, items are produced according to specifications thereby minimizing defective items, the cost of rework and subsequently throughput time. Hence, customer focus enhances effective productivity by reducing internal and external failure costs along with ensuring that only those goods and services are produced are in demand (Khan, 2003).

2.4.3 Obsession with Quality

This element of TQM focuses on meeting the objective of satisfying customers through quality products and services. In order to achieve this, personnel at all levels within the organization should strive to improve their work (Goetsch and Stanley, 2006). This means that if quality is incorporated into every aspect of work processes

within the organization, the end result will be quality products or services and ultimately customer satisfaction.

Research has shown that business organizations with good or excellent quality typically benefit in a variety of ways: an enhanced reputation for quality, the ability to command premium prices, an increased market share, greater customer loyalty, lower liability costs, fewer production or service problems, thereby yielding higher productivity, fewer complaints from customers, lower production costs, and higher profits (Stevenson, 2007).

KNUST

2.4.4 Scientific Approach

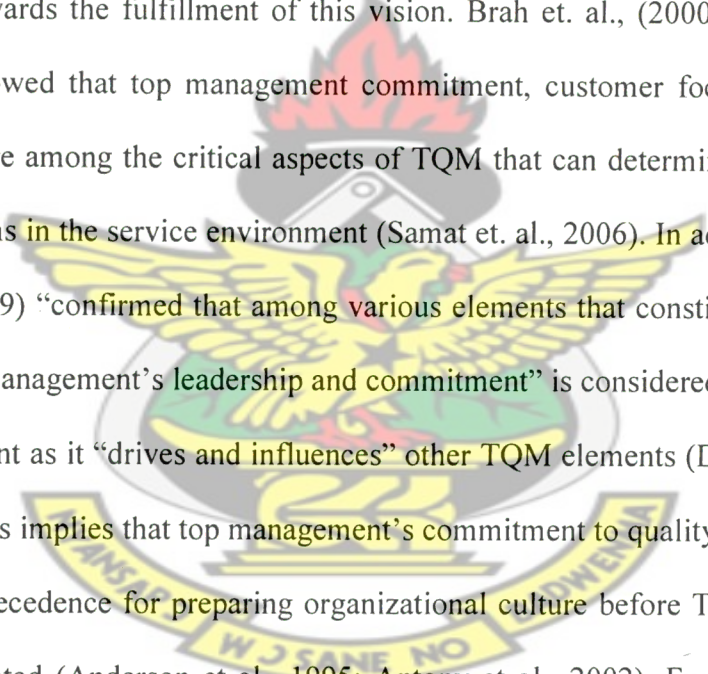
Through a scientific approach information is used in establishing benchmarks, monitoring performance and making improvements. This feature of total quality helps in structuring work and enhancing decision making in addition to problem solving that relates to work (Goetsch and Stanley, 2006).

The integration of total quality management, performance measurement and benchmarking comprises the essential elements of competitiveness. It establishes a culture of continuous improvement, provides external perspective, and encourages the release of the energies and creativity of an organization's employees (Zairi and Hutton, 1995).

Benchmarking can be extremely useful in overcoming management complacency about the status quo and in exposing incorrect perceptions about the company's and competitors' strengths and weaknesses. It may involve an organization accepting that

its performance in certain areas is not competitive and that a dramatic improvement is needed. Furthermore, it adds an external perspective to a total quality organization by ensuring that the wheel of continuous improvement is turning in the right direction, that is, towards achieving higher standards of competitiveness (Zairi and Hutton, 1995).

2.4.5 Long Term Commitment

According to Anderson et. al., (1994), there should be a visionary leadership stating the role of top management in defining a long-range quality oriented vision of an organization, implementing a plan of action and inspiring and motivating the entire organization towards the fulfillment of this vision. Brah et. al., (2000) conducted a study which showed that top management commitment, customer focus, employee involvement were among the critical aspects of TQM that can determine the success of TQM programs in the service environment (Samat et. al., 2006). In addition to this, Jung et. al., (2009) “confirmed that among various elements that constitute the TQM construct, “top management’s leadership and commitment” is considered the foremost influential element as it “drives and influences” other TQM elements (Deming, 1986; Juran, 1986). This implies that top management’s commitment to quality management is an absolute precedence for preparing organizational culture before TQM practices can be implemented (Anderson et al., 1995; Antony et al., 2002). Furthermore, top management can facilitate the unity of purpose as well as change process management and learning processes (Ahire et al., 1996; Anderson et al., 1995; Hamlin et al., 1997)”. 

However, with regard to the management initiatives linked to quality practices, there should be adequate control throughout the supply chain. This may require extension of the company's supply chain to include internal production of some raw materials or components, reliable transportation and assuring timely communication along the value chain (Mehra *et. al.*, 2003). TQM reflected in organizational missions keeps future strategies in line with the objectively chosen short- and long-term goals (Juran, 1989).

2.4.6 Teamwork

A team is a small number of people with complementary skills who are committed to a shared purpose, collective performance goals and a common approach for which they hold themselves mutually accountable (Ngole *et. al.*, 2008). The concept of teams and teamwork is of central importance to quality management (Goetsch and Stanley, 2006). Ngole *et. al.*, (2008) suggests that there is a consensus in TQM research that unless employees are involved through cross-functional teams, TQM cannot be accomplished and commitment to continuous improvement would fade (Dean and Bowen, 1994; Ahire *et al.*, 1996; Whitfield *et al.*, 1995).

2.4.7 Continual Process Improvement

Continuous improvement is essential for the very survival of every company. This is because the ever-changing tastes of customers and pressure from competitors induce firms to adopt proactive strategies to retain and expand market share. Both incremental and breakthrough improvements enhance productivity by decreasing costs and/or improving performance. Thus performance is enhanced through greater

responsiveness, better products, shorter throughput time and unique marketing, engineering production strategies (Khan, 2003).

A study conducted by Torres and Guo (2004) in a hospital setting showed that continuous quality improvement programmes improved patient satisfaction and enabled medical providers to succeed in an increasingly competitive environment (Tam, 2007). Furthermore, Yucelt (1994) suggests achieving high levels of patient satisfaction can lead to loyalty and generate referrals that enhance long-term success.” However, improvement is not a one-time effort. Management is obligated to look continually for ways to reduce waste and improve quality (Metri, 2006).

According to Zairi and Hutton (1995), in a total quality organization the culture is focused on continuous process improvement to better meet the needs of internal and external customers. Total customer satisfaction is the ultimate aim and the policies and strategies are wholly market-driven. As a result, the processes and activities of the organization are aligned for the optimization of value-added activities.

2.4.8 Education and Training

Shenawy et. al., (2007) “suggest that training employees is crucial for building the “human capital” of an organization (Dean and Bowen, 1994; Sitkin et al., 1994; Hackman and Wageman, 1995). Furthermore, training and education are essential to provide employees with new techniques and practices necessary to implement TQM successfully using techniques such as brainstorming (Ahire et al., 1996; Hackman and Wageman, 1995). Training and education are also necessary for teaching the TQM philosophy that requires permanent change in individual behaviors and attitudes (Reed et al., 2000) and leads to strengthening of organization’s culture”.

Motwani et. al., (1994) broadly defines training to include both skilled-based learning as well as education. Employees receive training in the use of quality measurement techniques so as to develop their problem-solving skills. Deming (1986) clearly emphasizes the importance of his thought that it applies to all levels of the organization. Training can be a powerful building-block for a foundation of understanding and skills that will help the organization to reach business goals. It influences the process that can help to improve quality and represents one of the best communication vehicles that any company has (Motwani et. al., 1994).

KNUST

2.4.9 Freedom through Control/Ownership

Involving and empowering employees is fundamental to total quality as a way to simultaneously bring more minds to bear on the decision-making process and increase the ownership employees feel about decisions that are made. On the contrary, total quality detractors sometimes mistakenly see employee involvement as a loss of management control, when in fact control is fundamental to total quality. The freedom enjoyed in a total quality setting is actually the result of well-planned and well-carried-out controls (Goetsch and Stanley, 2006).

According to Metri (2006), improved performance cannot occur unless employees in an organization feel comfortable to speak truthfully and feel confident that their suggestions will be taken seriously.

2.4.10 Unity of Purpose

For an organization to realize the benefits of TQM, the consideration of human factors is critical for the successful implementation of TQM. The human factors that have been identified in TQM research include management (leadership) style, type of employees, departmental interaction, management commitment, employee's attitude toward change, authority to empower employees, rewards/recognition for innovation and citizenship behaviours (Joiner, 2007).

Employees' skills, behaviour, morale, attitudes and motivations are some critical determinants of long-term success in satisfying customer needs. Furthermore, these factors also contribute to promoting, developing and sustaining profitable relationships with appropriate customers. Motivating employees to better performance and improved relationships with internal and external customers is likely to be an important part of the equation when we consider relationships built and maintained by individuals. Customers are always more loyal to the employee who deals with them than the wider organization (Zineldin, 2004).

2.4.11 Employee Involvement and Empowerment

A central part of the TQM philosophy is developing a system in which there is a high degree of employee participation both at the bottom and in the middle levels of an organization (Barczyk, 2000). It involves giving employees responsibility for quality and the authority to make decisions. According to Anderson *et. al.*, (1994), there should be collaboration among different individuals and groups, where all entities are engaging in non-competitive, mutually beneficial, win-win activities.

It is of great importance to develop a system of recognition and rewards for good ideas and meritorious quality performance. To encourage employees to provide ideas for improvement and perform in a quality fashion, a company needs a set of incentives; financial or non-financial. However, group incentives, as opposed to individual incentives, are most compatible with TQM (Deming, 1986).

Recognition is worth a lot and leads to job commitment which represents the extent of agreement between the employee and the fundamental values and purpose of the organization. To the extent that agreement exists, an employee could be more motivated to expend energy on organizational tasks and to provide high process, product and service quality to satisfy the organizational customers (Anderson *et. al.*, 1994).

Effective communication is an essential process in quality management, for the reason that communication is the glue that binds an organization's efforts vis-à-vis total quality management. Communication channels in a quality oriented organization flow upward, downward and laterally. On the other hand, ineffective communication will doom the cleverest of quality management initiatives (Brocka and Brocka, 1992). For the success of each element in TQM, communication is extremely essential.

According to Jung *et. al.*, (2009), empowering and involving all employees for making continuous improvement is essential as employees will have more enthusiasm toward change processes, and subsequently more participation (Handfield *et. al.*, 1998; Ahire *et al.*, 1996). As employee empowerment and involvement is encouraged,

clear and open communication of competitive strategy is also facilitated (Ahire et al., 1996).

2.5 Quality

According to Oakland (1994), quality is often used to signify excellence of a product or service. However, the word quality has been defined in so many ways. According to Deming (1993), a product or service possesses quality if it helps somebody and enjoys a good and sustainable market; Juran and Gryna (1988) define it as consisting of those product features which meet the needs of customers and thereby provide product satisfaction; the American National Standard Institute (ANSI) and the American Society for Quality (ASQ) define quality as the totality of features and characteristics of a product or service that bears on its ability to satisfy given needs (Evans and Lindsay, 2005). All three definitions tend to lay emphasis on a crucial point; the need for a product or service to benefit a customer, thus meeting customer expectations and as a result, satisfying the customer.

According to Evans and Lindsay (2005), conformance to specifications is a key definition of quality, because it provides a means of measuring quality. Nonetheless, specifications are meaningless if they do not reflect attributes that are deemed important to the customer.

Conversely, Karou Ishikawa, a Japanese quality guru defines quality as a broad concept that goes beyond just product quality to also include the quality of people, processes and every other aspect of the organization (Goetsch and Stanley, 2006).

This implies that, the quality of a product or service will be influenced by the quality of people and processes involved in its production or delivery.

Customers always have an experience when they interact with an organization. In a service context, the customer is usually part of the processes and therefore it is necessary to deliver quality service processes to achieve customer satisfaction. The task of value enhancement requires quality improvement programs to deliver and continuously enhance the benefits desired by customers. Poor quality places a firm at a competitive disadvantage, potentially driving away dissatisfied customers. Recent years have witnessed a veritable explosion of discontent with service quality at a time when the qualities of many manufacturers have been improving (Lovelock *et. al.*, 2007).

2.5.1 Service Quality

Since service is a performance, an organization needs to measure and monitor it to know where the organization stands in relation to customers' expectations and perceptions. Although management may think that the quality of service offered to customers or clients is very good, customers may tend to have a different perception. Hence, understanding the nature and determinants of customer expectations is essential to ensure that service performance meets or exceeds expectations (Zaid, 1995).

According to Longnecker and Scazzero (2005), service quality will be enhanced when an organization implements an effective improvement system. Yet, even the most effective system must evolve and mature in conjunction with the dynamic demands

associated with changing organizational needs. This suggests that systematic approaches to long-term quality improvement must be periodically scrutinized and feedback provided to enhance quality improvement systems.

According to Yasin et. al., (2004), service quality is a multi-dimensional construct and may therefore be viewed based on the attributes of the service delivery system, the extent of customer satisfaction and/or the interactions among the different elements of the service system which define the service encounter. Yet, the multi-dimensional attribute of service quality makes it difficult to measure.

2.5.2 Dimensions of Service Quality

SERVQUAL is an instrument for measuring customer perceptions of service quality developed by Zeithaml et al. (1990). It consists of five dimensions of service quality; tangibles, reliability, responsiveness, assurance and empathy. These five key dimensions have been defined by Evans and Lindsay (2005) as follows;

- “Reliability refers to the ability to provide what was promised, dependably and accurately.
- Assurance refers to the knowledge and courtesy of employees, and their ability to convey trust and confidence.
- Tangibles refer to the physical facilities and equipment, and the appearance of personnel. It also includes attractive facilities, appropriately dressed employees, and well designed forms that are easy to read and interpret.
- Empathy refers to the degree of caring and individual attention provided to customers.

- Responsiveness refers to the willingness to help customers and provide prompt service”

On the other hand, Armistead and Clark (1992) contend that it does not matter which dimensions are selected to measure service quality as long as they reflect the breadth of service quality the customer desires.

According to Zeithaml et al., (1990), in determining service quality perceptions, reliability is the most critical dimension regardless of the service being studied". On the other hand, SERVQUAL results have consistently shown tangibles to be the least important" dimension in determining customers' perceptions of service quality (Zeithaml et al., 1990).

One of the most widely used instruments to measure service quality is the SERVQUAL scale developed by Parasuraman et al. in 1985, and then refined in 1988 and 1991. The model on which SERVQUAL is based proposes that customers evaluate the quality of a service on five distinct dimensions, and that service quality is the difference between a customer's expectations and perceptions of the quality of a service. In order to operationalise this model, the authors developed 22 items that were designed to capture, in two separate columns, customers' perceptions and expectations of a service on those dimensions, making a total of 44 questions in all (Mei et. al., 1999).

According to Mei et. al., (1999), despite SERVQUAL's wide usage by academics and practicing managers in various industries, across different countries, a number of

studies have questioned the conceptual and operational base of the model (Babakus and Boller, 1992; Carman, 1990; Teas, 1994). More specifically, these studies have failed to confirm the five dimension structure across different industries. For example, a study conducted in the hospitality industry reported five dimensions of service quality, and these differed from those in SERVQUAL (Saleh and Ryan, 1991). These findings suggest that further customization of the scale for the hospitality industry is necessary.

According to Chowdhary and Prakash (2007), Parasuraman et al. (1988) have observed that their instrument (SERVQUAL) can be used to evaluate the relative importance of the dimensions of quality in influencing customers' overall perceptions of a service. The relative weight that customers seem to give to each quality dimension can be determined. One of the important results that have been reported in the early studies of relative importance is that customers are quite consistent in both their imputed and their direct rankings of the importance of the service quality attributes. In one key study (Parasuraman et al., 1988), reliability was demonstrated to be the most important dimension and empathy (a composite of understanding and access) the least important across a seemingly wide array of service types. Zeithaml et al. (1990) also report, using a variation of SERVQUAL that tangibles proves to be consistently unimportant.

Challenges with service quality include the reality that customer expectations often change over time and that different customers tend to have different perceptions, so what one customer might view as good service quality, another customer might not be satisfied with at all (Stevenson, 2007).

2.5.3 Importance of service quality

Service quality is viewed as cardinal in achieving service sector competitive advantage and financial success (Berry and Parasuraman, 1991; Zeithaml et al., 1996). It may not be enough to merely satisfy customers by meeting their basic and spoken requirements under the extant highly competitive environments. One main reason is that nowadays there are so many similar services for customers to choose from in the marketplace that they may get confused and ordinary or non-outstanding products may not attract their attention. A strategy for achieving “sustainable competitive advantage” could be to delight customers and to exceed their level of expectations on a perpetual basis. Through the use of “quality” services, customers may be retained and thereby market share can be captured and sustained (Rahman, 2004).

The delivery of service quality is considered a critical success factor for contemporary service companies. Two underlying processes generally explain the contribution of service quality to profitability: the attraction of new customers and retention of existing one (Rahman, 2004). First, service quality is regarded as one of the few means for service differentiation and competitive advantage, which attracts new customers and contributes to the market share. Second, service quality is regarded as an important means for customer retention. It has been argued that service excellence enhances customers’ inclination to buy again, to buy more, to buy other services, to become less price sensitive and to tell others about their favorable experiences (Anderson et al., 1994; Zeithaml et al., 1996). A growing number of organizations use quality management as a strategic foundation for generating a competitive advantage

(Reinartz and Kumar, 2000) and improving firm performance (Hendricks and Singhal, 1997) and stock market value (Nilsson et al., 2001).

2.6 Organizational Performance

Firm performance may at various times be reflected by financial outcomes, sales or market growth, customer satisfaction or establishing a foundation upon which future growth may take place (Ke et. al., 2008).

According to Taylor and Wright (2003), the authors (Terziovski and Samson, 1999; Samson and Terziovski, 1999) investigated the link between TQM practice and organizational performance, based on secondary data from the Australian Manufacturing Council. In their sample of 962 Australian and 379 New Zealand manufacturing sites, they found that TQM was significantly related to organizational performance for six out of their 14 dependent variables, namely: customer satisfaction, employee morale, delivery, productivity, cashflow and sales growth.

Their central conclusion was that the softer elements of TQM such as leadership, people management and customer focus were the strongest predictors of performance. In a summary of their findings, they pointed to the need for a longitudinal design, together with the need to trace the progress of particular companies.

According to Wiele et. al., (2002), positive evidence on the direct relationship between customer satisfaction and organizational performance is found by Koska (1990) and Nelson et. al., (1992) in hospital settings with higher profitability; Aaker and Jacobson (1994) found better stock return linked to improved quality perceptions; Anderson et. al., (1994) found a significant association between customer satisfaction and accounting return on assets; Fornell (1992) shows that higher customer

satisfaction translates into higher normal market share growth, the ability to charge a higher price, improved customer loyalty with a strong link to improved profitability and lower transaction costs. Customer satisfaction is also found to be strongly correlated with repurchase intentions, the willingness to recommend the company and to improved cross-buying (Cronin and Taylor, 1992; Zeithaml et.al., 1996; Anderson and Sullivan, 1993).

Some researchers conducted empirical studies in order to test the relationship between quality management practice and organizational performance. According to Wiele et. al., (2002), the empirical evidence suggests that TQM brings increased quality and productivity, along with improved customer and employee satisfaction (Barker and Cagwin, 2000; Flynn et al., 1994, 1995; Forker, 1996; Garvin, 1988; Powell, 1995; Ritter, 1992; Samson and Terziovski, 1999; Sluti, 1992; Spencer, 1995; Terziovski and Sohal, 2000).

2.7 Customer loyalty

The issue of customer retention must be seen in the context of the existing level of customer loyalty. Retaining existing customers reduces the necessity of attracting new ones (Replacement) and can even reduce offensive marketing cost. Although there is no universally agreed definition of customer loyalty (Uncles et al., 2003), customer loyalty can be defined as a commitment to continue do business with a company on an on-going basis. According to Uncles et al. (2003), loyalty is something that consumers may exhibit to brands, services, stores, product categories (e.g. cigarettes), and activities (e.g. swimming). Loyalty can be also defined as a state of mind, a set of

attitudes, beliefs, desires, etc. A company benefits from customer's loyal behavior, but these results from their state of mind.

Zineldin (2006) points out that recovery of dissatisfied customers is possible, and the benefits of turning around a complaining customer are dramatic. In some circumstances, 95 percent of complainers will return if the complaint is handled satisfactorily. Companies must also consider the impact of word-of-mouth. A happy customer is likely to tell others that she/he is happy and a dissatisfied customer is likely to tell others that the company is not good. Research indicates that a dissatisfied customer tells an average of 9-10 people about the bad experience, and 13 percent will tell approximately 20 people. Finally, unresolved important problems allows customers to spread bad word-of-mouth and this may hurt the image of a company. Switches due to unresolved complaints, or poor relationship management and marketing by a company, can and should be avoided. Relationship management and marketing that encourages complaints and ensures that complaints are dealt with well is the best defense against this cause of switching (Zineldin, 2006).

2.7.1 Customer satisfaction and loyalty

Customer satisfaction and loyalty are some key elements of business success and profitability. The more satisfied the customer, the more loyal the customer and the more durable the relationship. And the longer this lasts, the more profit the company stands to make and the higher the market share. Evidence suggests that higher quality improves margins by helping to create customer loyalty and a competitive edge, thus increasing market share, which in turn leads to higher profitability and scale economies (Zineldin, 2006).

According to Bowen and Chen (2001), it is commonly known that there is a positive relationship between customer loyalty and profitability. Reichheld and Sasser (1990) found that when a company retains just 5 percent more of its customers, profits increase by 25 percent to 125 percent. According to Bowen and Chen (2001), Raman (1999) states, loyal customers serve as a "fantastic marketing force" by providing recommendations and spreading positive word-of-mouth; those partnership-like activities are the best available advertising a company can get.

According to Kandampully and Suhartanto (2000), "customer satisfaction is considered to be one of the most important outcomes of all marketing activities in a market-oriented firm. The obvious need for satisfying the firm's customers is to expand the business, to gain a higher market share, and to acquire repeat and referral business, all of which lead to improved profitability" (Barsky, 1992).

Getty and Thompson (1994) studied relationships between the quality of lodging, satisfaction, and the resulting effect on customers' intentions to recommend the lodging to prospective customers. Their findings suggest that customer intentions to recommend are a function of their perception of both their satisfaction and service quality with the lodging experience. Hence it can be concluded that there is a positive relationship between customer satisfaction and customer loyalty.

2.8 Competition

The fact that businesses must be close to their customers seems a benign enough message. However, regardless of all the lip service given to the market orientation these days, customers are sometimes overlooked (Peters and Waterman, 1982). Pine

and Gilmore (1998) suggest that services are undergoing a transformation from the traditional concept of a service transaction to one of an experience, where an experience creates added value by engaging and connecting with the customer in a way that is personal and memorable. In support of this, (Fitzsimmons and Fitzsimmons, 2001) emphasize the need to remind customers of their experience by making the intangible tangible, since service industries have been restructured by deregulation and new technologies.

Increasingly, organizations are recognizing the strategic importance of quality management and have arrived at the conclusion that effective quality management can enhance their competitive abilities and provide strategic advantages in the market place (Anderson *et. al.*, 1994). All businesses are now concerned with quality because they have come to understand that high quality can give a significant competitive advantage (Fitzsimmons and Fitzsimmons, 2001). According to Covin *et. al.*, (1999), the faster an organizations business environment is changing, the more critical it becomes for its managers to be adept in reading the winds of change and making timely strategic adjustments. The Global marketplace and the domestic and international competition have made organizations around the world realize that their survival depends on high quality (Silverman *et. al.*, 1999).

The importance of customers to the survival of any business should not be overlooked. Consequently, as more organizations enter an industry, competition should raise deep concerns for management (Warren, 2002). It is five times more expensive to win a new customer than keep an existing one (Jeffries *et. al.*, 1996). Thus, the need to align strategies with customer needs in order to outperform the

competition. According to Peters and Waterman (1982), service, quality and reliability are strategies aimed at loyalty and long-term revenue stream growth.

2.8.1 Competitive Advantage

Porter (1985) suggests a competitive advantage exists when a firm maintains an edge over rivals in retaining customers and in positioning a company to take advantage of environmental changes. A competitive advantage grows out of the value a firm is able to create for its buyers (Porter, 1985). According to Richardson (2006), a competitive advantage is said to be sustainable if it cannot be copied, substituted or eroded by the actions of rivals and is not made redundant by development in the environment. In other words, sustainability depends on competitive defendability (Porter, 1980).

According to Wit *et. al.*, (2005), firms need to gain a competitive advantage over rival organizations operating in the same business area in order to be successful. It is therefore crucial for firms to accrue enough power to counterbalance the demands of buyers and suppliers, to outperform rival producers and discourage new firms from entering the business. Profit impact marketing studies (PIMS) have demonstrated a critical factor affecting a business unit's competitive performance is the perceived quality of products and services relative to competitors (Hirons *et. al.*, 1998). Therefore by creating more value for customers and continually improving operating efficiencies, a company can become more competitive (Kaplan and Norton, 1999). This implies that competitive advantage can be achieved if a business system creates superior value for buyers.

In addition to this, the competitive advantage of a firm depends on the business system that it has developed to relate itself to its business environment. A business system refers to the configuration of resources, activities and product or service offerings intended to create value for customers. In other words, it can be described as the way a firm conducts its business (Wit et. al., 2005).

In the global economy today, many companies resort to Total Quality Management to gain competitiveness in the market place and it has become an essential part of every organization. For organizations seeking to have an edge over their competitors, producing products and services that are of superior quality to that of potential rivals is highly sought for (Ngole *et. al.*, 2008).

Quality is a discipline that attracts the interest of managers at all levels of the organization and it is no longer an isolated function, dominated by technical experts. At a growing number of companies, it has entered the corporate mainstream, becoming an activity as worthy of attention in the marketing of commodities. (Garvin, 1988). There is considerable and growing interest in quality for several reasons; customer's increasing demanding quality requirements, higher competition in markets, demands for improved profitability and growing complexity of goods and services as well as product liability legislation (Sandholm, 2000). The most progressive organizations are embarking on a journey of transformation towards TQM and this is coupled with its spread, from manufacturing to the service sector and on to public services (Dale, 1999).

2.8.2 The Relationship between Quality and Performance

As with all trends, there has been a driving force behind the introduction of quality initiatives. Macdonald and Piggot (1992) suggest that whereas these driving forces that stimulate action on total quality may be the need to improve product or service quality, it has an overall objective of improving company performance. The introduction of total quality management (TQM) has played an important role in the development of contemporary management practices. Quality is now considered as a key strategic factor in achieving business success. In order to enhance the competitive position and improve business performance, companies worldwide, large and small, manufacturing and service, have applied the principles of total quality (Dean and Evans, 1994).

The transport sector plays a key role in economic development. In West Africa, the sector generates about 6% of GDP. However, inefficiency prevails due to the high cost of vehicle operation on poor roads. In Ghana, roads are the predominant mode of transport accounting for about 94% of freight and 97% of passenger traffic movements (IMF, 2007). According to Slack *et. al.*, (2006), “all operations, no matter how well managed are capable of further improvement. Improvement refers to the activity of closing the gap between the current and the desired performance of an operation or process. Continuous improvement adopts an approach to improving performance that assumes a never-ending series of small incremental improvement steps”.

The adoption of total quality management has resulted in many companies dramatically improving their competitive position, with a focus on meeting and

exceeding customer requirements while dramatically reducing the cost of non-conformance (Zairi and Hutton, 1995).

KNUST



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research design and the sampling techniques that were adopted in order to achieve the objectives of this study. It provides a brief description of the single case study that was employed. However, questions developed in the various questionnaires administered were drawn from the literature review in chapter two. Finally, this chapter describes the data collection methods and data analysis employed in the study.

KNUST

3.2 History of Intercity STC Coaches Limited

Intercity STC Coaches Limited was established in 1909 as a Government Transport Department to cater for the needs of the Central Government. Formally known as State Transport Corporation (STC), it became a corporate body in 1965, to run commercial passenger services. In June 1995 it was incorporated as a Limited Liability Company under Ghana's Companies Code 1962 Act 179 in the name State Transport Company Limited. In June 2000 the assets of the company were purchased and organized into a new company, Vanef STC by a consortium of business concerns known as the Vanef Consortium. Finally, in 2003, the name of the Company was changed to Intercity STC Coaches Limited.

3.2.1 Company Profile

Intercity STC Coaches Ltd is a nationwide provider of scheduled Intercity Bus Transportation services in Ghana and the West Africa Sub-Region. With the exception of Koforidua, Intercity STC Coaches Ltd. run services to and from all

Regional Capitals in Ghana. In addition to this, an added-on convenience for its customers is the provision of an Advance Ticket Service.

3.2.2 Passenger Bus Service Routes

Apart from the Regional Capitals, Intercity STC Coaches Ltd. also run services to and from other local destinations, and three (3) West African countries namely Cote d'Ivoire, Burkina Faso and Benin. The Company boasts of nineteen (19) local and three (3) international stations. These include; Accra, Kumasi, Takoradi, Tamale, Bolgatanga, Bawku, Tema, Tudu, Aflao Berekum, Cape-Coast, Dormaa-Ahenkro, Fumbisi, Hohoe, Ho, Kpandu, Paga, Sunyani, Wa, Abidjan, Ouagadougou, and Cotonou.

3.2.3 Company Vision and Mission Statement

The vision of Intercity STC Coaches Ltd. is: "To be the leader in the road transport industry in Ghana and the ECOWAS sub-region". The Company's mission is: "To consistently and profitably deliver safe, comfortable and reliable road transport and allied services, using highly motivated and competent workforce and state of the art facilities to meet the aspirations of all."

3.2.4 Key Corporate Objectives

On the basis of its vision and mission, the Company has set for itself the following objectives:

- (1) To protect shareholders' investment and provide an acceptable rate of return.
- (2) To attain the highest standard of service in all the Company's activities to its customers.

(3) To attain market leadership in the road transport business in Ghana and the ECOWAS Sub-region.

(4) To recruit and maintain a competent, well motivated and satisfied professional at work.

3.3 Sample Size Determination and Sampling Technique

A pilot test was conducted with the sole aim of improving the structure and understanding of questions to establish clarity and to ensure that answering the questionnaire did not exceed the scheduled time limit. According to Hiron et. al., (1998) this is consistent with Babbie's (1990) view that the purpose of a pilot test is to improve the research instrument. Ten (10) users of Intercity STC's passenger bus service were chosen at random for the pilot test. Out of the ten (10), seven (7) questionnaires were self-administered whereas the remaining three (3) were interviewer administered. The pilot tested questionnaires were then revised and restructured.

A sample size of 450 was selected out of a population of 100,000 customers. The sample size was determined based on the average number of customers the company attended to monthly. The reason for this is that the daily numbers of customers are not fixed. Furthermore, Saunders et. al., (2007) suggests a sample size of 383 for a population of 100,000 at a 95% level of certainty. Conversely, because a 100% response rate was not assumed, a sample size of 450 was chosen.

The method of sampling employed was quota sampling. Groups were selected based on the routes through which the company's buses travel. Six routes were selected

from the three terminals present in the Accra branch. These were Kumasi, Cape Coast, Takoradi, Tamale, Paga and Ouagadougou.

Based on the schedule of departures from the three terminals, the following were the number of buses sampled for each route; 30,12,12,6,2, and 2 buses respectively. Due to the fact that it was impossible to ascertain capacity of each bus over the period within which the data was collected, it was assumed that a minimum of 40 passengers would be present in each bus travelling to the six routes. Based on this assumption, a quota of 7 was chosen for each bus sampled. However, purposive sampling was used in order to specifically target top management as this group represents the implementers of total quality management. Four (4) questionnaires were administered to top management out of which all responses were obtained.

3.3.1 Description of the Sample

Out of a sample size of 450, two (2) questionnaires were rejected because participants had not used the company's passenger bus service for a period of four years and therefore their perception of the quality of service delivery will be based on past and not present experience. The assumption here is that the quality of service delivery four years ago cannot be the same presently due to the diversity in the external business environment and internal factors within the company.

The remaining sample size of 448 consisted of 203 males and 245 females, representing 45.3 % and 54.7% of the total sample respectively. Although 54.7% of females represent more than half of the total sample, all participants of the survey were found to be regular users of the passenger bus service of Intercity STC Coaches

Ltd, therefore making the sample representative of the population as gender was not considered a criterion in the selection of individual cases. For the six destinations chosen; Kumasi, Cape Coast, Takoradi, Tamale, Paga and Ouagadougou, participants of the customer satisfaction survey represented 46.9%, 18.8%, 18.8%, 9.4%, 3.1% and 3.1% respectively. These percentages correspond to the number of buses travelling to the various routes that were sampled; 30,12,12,6,2 and 2 buses respectively. Clearly, these figures indicate that the passenger bus services to Kumasi have the greatest patronage, followed by Cape Coast and Takoradi, Tamale and finally Paga and Ouagadougou. Table 3.1 indicates the percentages of customers in the sample traveling to the various routes.

Table 3.1 Respondents travelling to the six routes

			Gender		Total
			Male	Female	
Destinaton	Kumasi	Count	84	126	210
		% within Destinaton	40.0%	60.0%	100.0%
	Cape Coast	Count	41	43	84
		% within Destinaton	48.8%	51.2%	100.0%
	Takoradi	Count	44	40	84
		% within Destinaton	52.4%	47.6%	100.0%
	Tamale	Count	21	21	42
		% within Destinaton	50.0%	50.0%	100.0%
	Paga	Count	6	8	14
		% within Destinaton	42.9%	57.1%	100.0%
	Ouagadougou	Count	7	7	14
		% within Destinaton	50.0%	50.0%	100.0%
Total		Count	203	245	448
		% within Destinaton	45.3%	54.7%	100.0%

Source: Researchers fieldwork

3.4 Questionnaire Design

The type of questions used to design the questionnaires were category, open-ended and rating questions. Delivery and collection questionnaire were chosen to enhance respondent participation and obtain a relatively high response rate (Saunders et. al., 2007).

The five SERQUAL dimensions were used to ascertain the quality of Intercity STC Coaches Ltd. service delivery based on the perception of the company's customers. All five items were measured using a 5-point Likert scale anchored by "Strongly dissatisfied" (1) and "Strongly satisfied" (5). In addition to this, participants of the survey were asked to rate the overall quality of service delivery of the passenger bus service using a 5 point scale ranging from "Excellent" (1) to "Very poor" (5).

Questionnaires for top management of Intercity STC Coaches Ltd. was also designed using a five point Likert scale anchored by "Strongly disagree" (1) and "Strongly agree" (5), representing the level to which total quality management elements were present in its implementation. For both questionnaires, information sheets were attached indicating the criteria for participation and the purpose for which the questionnaires were being administered.

3.5 Method of Data Collection

Primary data was collected through the use of self-administered questionnaires, interviewer administered questionnaires, observation and unstructured interviews. Secondary data was collected from the company's website and through interviews. A customer satisfaction survey was conducted over a period of six (6) days over an eight

hour period each day, during which seventy-five (75) questionnaires were administered per day.

3.6 Method of Data Analysis

All data collected were entered into Statistical Package for Social Sciences (SPSS) version 16 for quantitative analysis. Descriptive statistics, including frequencies, cross tabulation tables, means, and coefficient of variation were computed for each variable. A reliability analysis was performed to assess the reliability of the scales used for TQM and service delivery. To identify any association between TQM elements and service quality dimensions a chi square test was performed.

3.6.1 Reliability of Questionnaires

A reliability test for the instruments used to measure the quality of service delivery was conducted to indicate how reliably the items measured the SERVQUAL construct. Kline (1998) points out that a reliability coefficient of 0.90 can be considered “excellent”, values around 0.80 as “very good” and values of 0.70 as “adequate”. Table 3.2 shows that the Cronbach’s alpha measure well exceeded the adequate point of 0.70 (Kline, 1998).

Table 3.2 Reliability of the SERVQUAL construct

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha		
.853	.869	27

Source: Researchers field work

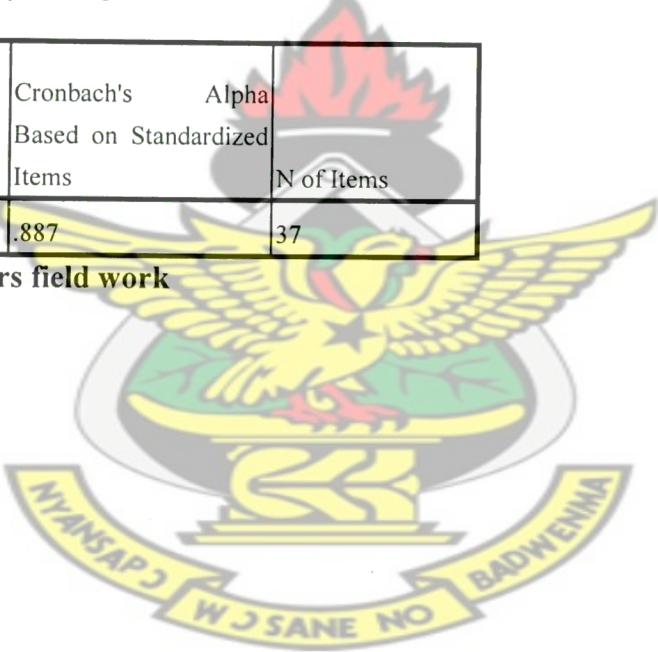
The 11 critical elements covered forty-eight items ranging from a minimum of two questions to a maximum of eight questions under each critical element. The results obtained from the reliability analysis showed that three critical elements had a variation of zero and were therefore removed from the scale. This therefore suggests that these three critical elements; teamwork, long-term commitment and continual process improvement are highly consistent in Intercity STC’s TQM implementation. The remaining eight elements produced a reliability value of 0.873 indicating a high reliability (Kline, 1998) as shown in table 4.6. Consequently, with the exclusion of three critical elements, the forty-eight items were reduced to thirty-seven

KNUST

Table 3.3 Reliability of TQM critical elements

	Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha		
.873	.887	37

Source: Researchers field work



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

Based on the research methodology proposed in the previous chapter, the findings from the customer satisfaction survey and administered questionnaires from top management of Intercity STC Coaches Ltd. are presented in chapter four. The corresponding analysis and discussions have been explained in detail.

4.2 Demographic Characteristics of Respondents

The customer satisfaction survey conducted, consisted of both males and females ranging from below 25years to above 55years as shown in table 4.1 below. Table 4.1 clearly points out that majority of Intercity STC Coaches Ltd. customers fall between the ages of less than 25years to 34years.

Table 4.1 Demographic characteristics of respondents

			Age					Total
			Below 25	25-34	35-44	45-54	55+	
Gender	Male	Count	63	71	47	9	13	203
		% within Age	38.2%	41.8%	69.1%	34.6%	68.4%	45.3%
	Female	Count	102	99	21	17	6	245
		% within Age	61.8%	58.2%	30.9%	65.4%	31.6%	54.7%
Total	Count	165	170	68	26	19	448	
	% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source: Researchers fieldwork

This group is made up 165 and 170 respondents respectively and in total, accounts for more than half of the sample size of 448. These figures indicate that a relatively large number of Intercity STC Coaches Ltd. customers are energetic youth who may have

high demands which the company would need to meet if it is to sustain this group of customers. The next group of customers which form a substantial number of the sample are those between the ages of 35-44years.

To reaffirm if majority of Intercity STC Coaches Ltd. customers base is made up of the youth, respondents were asked to indicate the number of times they traveled within a year. Table 4.2 below gives an estimation of the number of times each passenger travels within a year. From table 4.2, it can be concluded that customers between the ages of less than 25years and 34years travel the most, followed by customers between the ages of 35-44years. These findings can serve as a guide to the management of Intercity STC Coaches Ltd. in tailoring their passenger bus services and strategies to meet and exceed the needs of these young, energetic youth. With the knowledge that these age groups form the company's key customers, management can then focus on how to sustain them and attract other potential customers within these age groups.

Table 4.2 The number of times respondents travel within a year

	Age					Total
	Below 25	25-34	35-44	45-54	55+	
Yearly_trave l 1-5	84	70	18	4	1	177
6-10	51	71	38	18	12	190
11-15	13	15	6	2	4	40
16-20	6	4	3	2	0	15
21+	9	10	3	0	2	24
Total	163	170	68	26	19	446

Source: Researchers fieldwork

4.3 Customer Choice and Loyalty

Respondents were asked if they always traveled using the company's passenger bus service. Of the 448 respondents, 69.2% always traveled using the company's passenger bus service. This percentage of respondents represents more than half of the sample size. Conversely, 30.8% sometimes used other bus services for a number of reasons such as unreliability of scheduled buses departing on time and insufficient tickets just to mention a few. These reasons give an indication that this percent of respondents (30.8%) would prefer to travel using the Intercity STC's passenger bus service. However, Intercity STC Coaches failure to meet their timely travel needs makes these customers opt for bus services of the company's competitors. Furthermore, it suggests that customers are very critical about reliability when it comes to traveling.

The complaint of insufficiency of tickets also gives an indication that customers place a high level of importance on the availability of services. This means that passenger bus services should be available at the convenience of customers. Although, Intercity STC Coaches Ltd. has an organized passenger bus service which departs almost on an hourly basis, inconsistency in meeting some of these scheduled times may cause further delays in subsequent services. Management may need to reconsider the cost of losing customers to their competitors if these inconsistencies in meeting customer needs are not checked. It is important to note that the percentage of respondents (30.8%) represent a substantial number of Intercity STC Coaches Ltd. customer population and if the company's current or potential competitors should provide a comparatively better passenger bus service, Intercity STC Coaches may stand to lose

a substantial amount of its customer base and market share, and ultimately its profitability to its competitors.

In order to establish the levels of customer loyalty of the respondents (69.2%), they were asked to indicate the number of years in which they had been using the company's passenger bus service. The analysis is shown below in table 4.3. Out of 310 respondents representing 69.2%, 188 respondents had been using Intercity STC's Coaches passenger bus service for 6 years. This may suggest that for the past 6 years, Intercity STC Coaches Ltd. has managed to meet the needs of these customers. Furthermore, these customers continue to patronize the passenger bus service because they are being provided with what they consider as value to service delivery and are therefore content to continue using the company's services.

On the other hand, customers who have been using the passenger bus service between 1-5 years may have switched to using the company's passenger bus service because other transport services did not meet their needs. These findings agree with (Zineldin, 2006) "the more satisfied the customer, the more loyal the customer and the more durable the relationship. And the longer this lasts, the more profit the company stands to make and the higher the market share".

Table 4.3 Customer loyalty and patronage

			Only patronized service		Total
			Yes	No	
Duration	1 Year	Count	22	16	38
		% within Duration	57.9%	42.1%	100.0%
		% within only patronized	7.1%	11.6%	8.5%
	2 Years	Count	19	12	31
		% within Duration	61.3%	38.7%	100.0%
		% within Only patronized	6.1%	8.7%	6.9%
	3 Years	Count	17	2	19
		% within Duration	89.5%	10.5%	100.0%
		% within Only patronized	5.5%	1.4%	4.2%
	4 Years	Count	31	11	42
		% within Duration	73.8%	26.2%	100.0%
		% within Only patronized	10.0%	8.0%	9.4%
	5 Years	Count	33	16	49
		% within Duration	67.3%	32.7%	100.0%
		% within Only patronized	10.6%	11.6%	10.9%
	6 Years	Count	188	81	269
		% within Duration	69.9%	30.1%	100.0%
		% within Only patronized	60.6%	58.7%	60.0%
Total		Count	310	138	448
		% within Duration	69.2%	30.8%	100.0%
		% within Only patronized	100.0%	100.0%	100.0%

Source: Researchers fieldwork

4.3.1 Critical Factors

When asked the reason for patronizing the company’s passenger bus service, 58.3% of customers said it was due to safety. This is clearly shown in figure 4.1. In addition to this group, 17.3%, 6.4% and 2.6% of customers said it was both for safety and comfort, safety and reliability, and safety and affordability respectively. This suggests

that safety is one of the critical factors in guiding customers in choosing which companies' passenger bus service to patronize. On the other hand, only 3.2% of customers patronize the company's passenger bus service because they think it is convenient. In this context, convenience refers to location advantage and how organized the company's passenger bus service is in terms of scheduled departure times.

Title: A graph showing the reasons why customers patronise the passenger bus service of Intercity STC Coaches Limited.

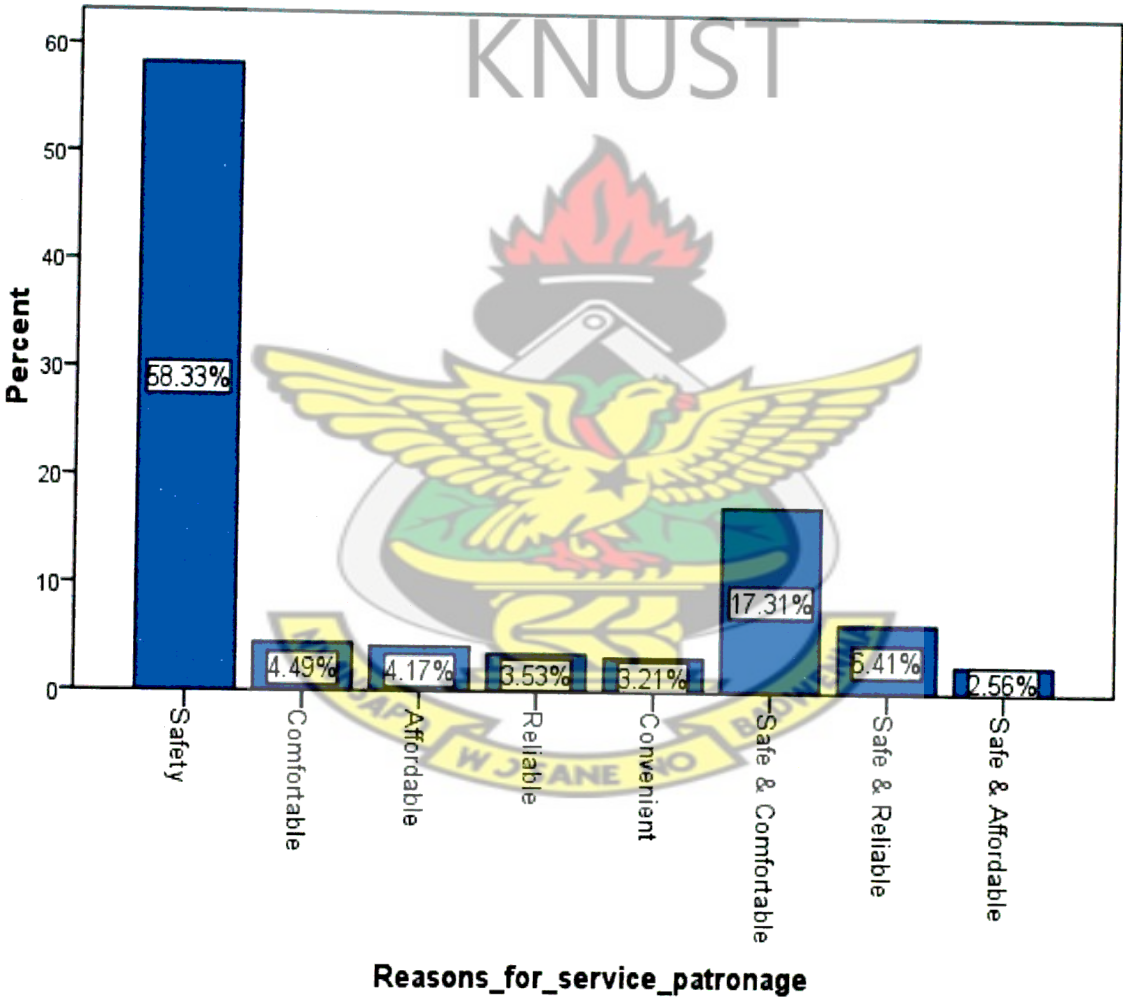


Fig. 4.1 Reasons for using Intercity STC's passenger bus service
Source: Researchers fieldwork

The response from customers suggests that Intercity STC Coaches Ltd. has managed to build a reputation for safety over the years. This is clearly one of the strengths of

the company and also adds to the image of the company. However, the relatively small number of respondents who patronize the passenger bus service because they think it is reliable and convenient has a lot of implications. It gives an indication that the majority of the respondents representing the population of the company's customers do not share these same views. This may be bad for Intercity STC Coaches Ltd. because safety alone may not be enough to satisfy and retain existing customers. Intercity STC Coaches Ltd. would have to live up to its mission of consistently and profitably delivering safe, comfortable and reliable road transport if it is to stay ahead of the competition and gain a competitive advantage in both the Ghanaian and International road transport sector.

KNUST

4.4 Dimensions of the SERVQUAL Model

The five dimensions of the SERVQUAL model were analyzed individually in order to identify areas of extreme dissatisfaction and satisfaction for further improvement (Zeithaml et. al., 1990). However, modifications were made to the SERVQUAL instrument to suit the industry under study. The mean, standard deviation and coefficients of variation for the five service quality dimensions was calculated as shown in table 4.4.

The service quality dimensions were paired and assessed based on how closely related they were. The coefficients of variation were used to compare and explain the variability in the quality of the five service quality dimension under consideration. The only service quality dimension which was considered separately was tangibles. This is because Zeithaml et. al., (1990) suggests that tangibles is the least considered dimension of service quality by customers.

Table 4.4 Mean, standard deviation and coefficient of variation of the SERVQUAL dimensions

Service delivery Criteria	Mean	Standard deviation	Coefficient of variation %(CV)
Responsiveness	3.866	0.931	24.1
Reliability	4.014	1.067	26.6
Tangibles	3.809	0.974	25.6
Assurance	3.698	1.088	29.4
Empathy	3.644	1.095	30.0

Source: Researchers fieldwork

4.4.1 Evaluation of Responsiveness and Reliability

The quality of responsiveness in service delivery was assessed based on two items; time provided at rest stops (E1) and assistance provided when weighing luggage (E2). However, eight items (C1-C8) were used to assess the reliability of service delivery. These items ranged from prompt departure of passenger bus services, handling of luggage, accuracy and speed in issuing out of tickets and driving.

Table 4.4 shows a higher coefficient of variation in reliability being 26.6% as compared to responsiveness which was 24.1%. These figures indicate a difference of 2.5% variability between reliability and responsiveness. The variation in reliability indicates more variability about the mean. This suggests that the levels of reliability are mostly inconsistent as compared to responsiveness. In order to explain, this relatively high variability in reliability, the eight (8) items used in measuring the levels of reliability were assessed.

From table 4.8, the 8 items used in assessing reliability had coefficients of variations ranging from 13.8-54.6% (refer to appendix 3), whereas the two items representing responsiveness had variations of 20 and 27.7% as shown in table 4.9 (refer to appendix 4). The item with the highest CV of 54.6% under reliability represented the prompt departure of passenger bus services. From the customer satisfaction survey that was conducted, 72.8% of respondents expressed dissatisfaction at the delay in scheduled departure time for the passenger bus service as shown in figure 4.2 below.

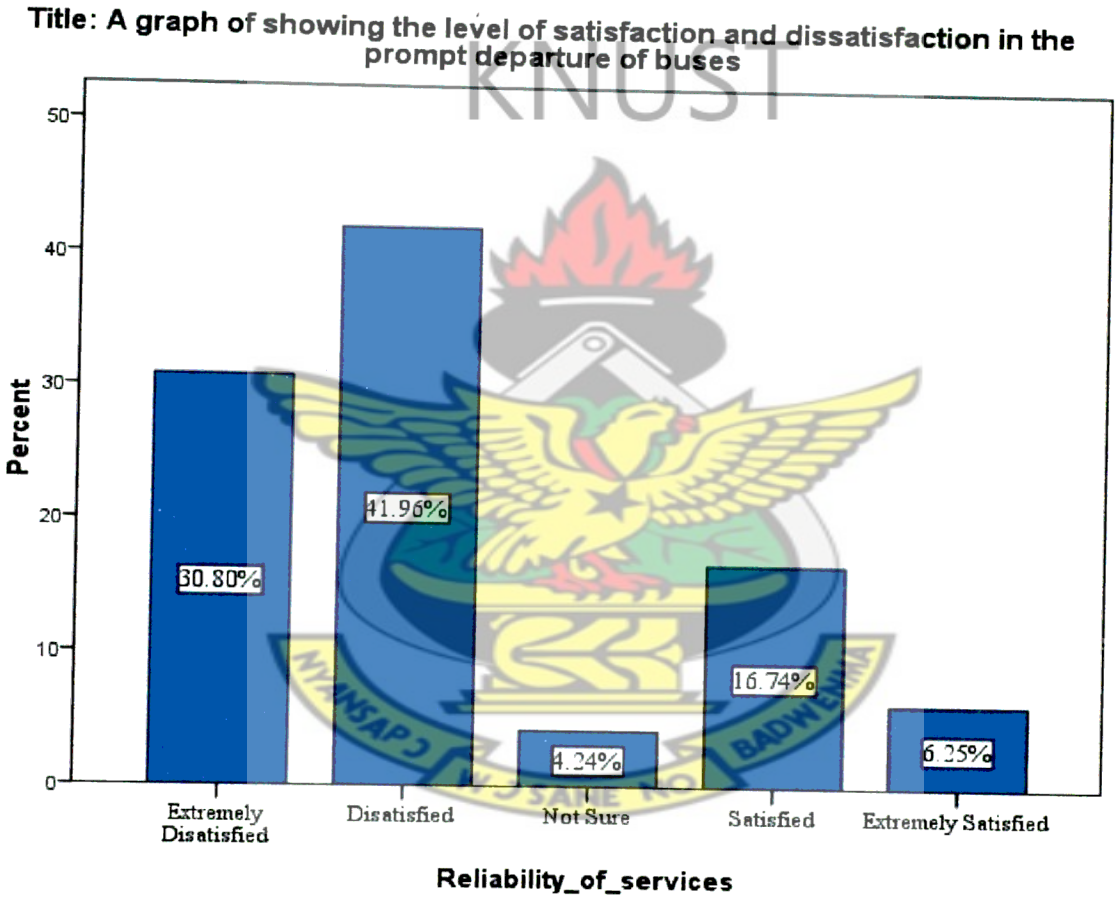


Figure 4.2 Customer perceptions on prompt departure of passenger bus services
Source: Researchers fieldwork

This relatively high variability in reliability of passenger bus services has significant managerial implications. The variability of 54.6% could suggest that more than half the time the passenger bus service is inconsistent in adhering to scheduled departure times. This implies that for every ten buses that leave the Intercity STC yard to any of

the routes, five or six out of the ten buses would depart later than the scheduled departure time. This means that more than half the customers that use Intercity STC's passenger bus service will experience a delay in traveling as revealed from the analysis. Unfortunately, this does not give Intercity STC Coaches Ltd. a good image of reliability and further fails to meet the company's mission statement of providing reliable transport services.

One reason for this variability could be as a result of lack of sufficient vehicles to meet the timely demands of passengers. This also suggests that customers would have to wait for a vehicle to return to the Intercity STC yard in Accra from one journey, to convey them to their destinations. Another explanation for the variability in reliability of passenger bus services may be as a result of the limit in routes when traveling to and from Accra. This may result in relatively heavy traffic during peak periods of the day, causing buses to take longer than expected for a particular journey and hence a delay in the subsequent bus service awaiting this same bus to convey customers to their destinations.

Alternatively, the variability in reliability may be as a result of delays caused in the servicing of vehicles for the next journey. Considering the distance of the journey to the six routes selected, it requires that a thorough examination of buses should be taken to prevent unforeseen breakdown of buses. These reasons may explain the variability in reliability being higher than responsiveness. Management would therefore have to re-strategize and put appropriate measures in place in order to improve reliability in scheduled departure times as this is one of the important factors customers consider when traveling. Moreover failure to meet reliability could be a

critical factor that would dissuade customers from patronizing Intercity STC's passenger bus service. On the other hand, it suggests that promptness in reliability of passenger bus services would go a long way in creating a competitive edge for Intercity STC Coaches over its competitors.

The relatively lower variability in responsiveness may be as a result of the relatively high level of training provided to loaders and drivers. The customer satisfaction survey indicated 79.9% of respondents expressing satisfaction at the assistance provided during weighing and packing of luggage, and another 80.6% expressing their satisfaction at the time spent at rest stops. These figures indicate that more than half the sample is satisfied with the responsiveness in service delivery, with only 6.2 and 14.5% expressing their dissatisfaction respectively. The remaining respondents did not express satisfaction or dissatisfaction as they traveled "light" (without heavy luggage requiring no assistance) and therefore these questions did not apply to them.

These figures suggest that employees understand how their attitudes contribute to the overall quality of service delivery, thus their willingness to assist customers as promptly as possible. It also gives an indication of a disciplined and committed workforce. Although responsiveness seems more consistent than reliability, both areas need significant improvements.

4.4.2 Evaluation of Tangibles

The coefficient of variation for tangibles was 25.6% as shown in table 4.4. This is 1.5% more than responsiveness and 1% less than reliability. According to Zeithaml et.

al., (1990), tangibles is the least of the service quality dimensions that matters to customers.

However, in trying to explain what accounted for the variation, the individual items used to measure the level of tangibles were assessed. These 17 items showed coefficients of variation ranging from 11.9% to 39.8% in table 4.10 (refer to appendix 5). The two items having a relatively high coefficient of variation of 39.8 and 37.3% represented the appearance of the waiting lounge (A3) and the washroom (A7) respectively. 50.7% of respondents expressed their dissatisfaction at the appearance of the waiting lounge. Another 7.4% were not sure what to express, and the remaining 41.9% expressed their satisfaction.

The findings from the customer satisfaction survey revealed that the type of seats present at the waiting lounge accounted for the dissatisfaction in its appearance. Considering the amount of time customers spend waiting for their bus service to arrive, customers need to feel a sense of comfort. Management may need to reconsider offering comfort to customers, not just in the bus, but also at the waiting lounge. Every aspect of service delivery affects the overall perception of the quality of service delivery by customers and no aspect should be overlooked. Although tangibles is the least of the service quality dimensions considered by customers (Zeithaml et. al., 1990) its enhancement could boost the image of Intercity STC Coaches Ltd. On the other hand, the management of Intercity STC Coaches Ltd. should consider the improvement of this item as part of customer care and not just for aesthetic purposes.

Similarly, 43.8% of customer expressed their dissatisfaction at the appearance of the washroom, with another 39.1% of respondents not sure as they had never used the washroom before. However, the remaining 17.1% expressed their satisfaction.

The appearance of the washroom may seem distant from what can be considered as part of the service delivery process, but should be considered as part of customer service, especially being a necessity. The appearance of the washroom plays a contributing role to the image of service delivery of Intercity STC Coaches Limited. Considering the length of time involved in traveling to the various routes selected, customers are more likely to use this facility in order to prevent short stops in between the journey, and therefore the washroom should be considered as part of the service being provided to customers without charging extra fees for utilizing this facility. In view of any possible renovation, management should consider these two areas of tangibility.

4.4.3 Evaluation of Assurance and Empathy

The coefficients of variation from table 4.4 for assurance and empathy are 29.4 and 30% respectively, with a difference of only 0.6%, which is relatively low. This suggests that the quality of assurance provided to customers is more consistent as compared to that of empathy. Six (6) items were used to measure the level of assurance in service delivery as shown in table 4.11 (refer to appendix 6), out of which three (3) items; B1, B2 and B6 showed a relatively high degree of variation representing the human relations of Sales assistants and the prompt delivery of information to customers during delays in the passenger bus service.

42.2% of respondents expressed their dissatisfaction at the delay in the communication of information pertaining to their delayed travel schedules by the company. Conversely, 35% of respondents expressed their satisfaction at the promptness of communication from the company. Another 22.8% were not sure whether there were delays in communication. This may suggest that this percentage (22.8%) of respondents have not experienced delays in their passenger bus service and have therefore not heard any announcements related to delays in departure times. Alternatively, it suggests that during delays in departure times, these respondents do not hear any related announcements given. These figures have serious managerial implications indicating that the management of Intercity STC Coaches Ltd. may be taking customers for granted most often and may easily lose these customers if current or potential competitors are able to provide comparatively better service delivery.

The relatively high variability in the human relations of Sales assistants may be as a result of inconsistency in the level of human relations customers encounter with sales assistants. This means that sales assistants do not always have a polite or friendly attitude towards customers. Kotler and Keller (2006) suggest that because customers interact with personnel on the front line, they are able to identify with them better than the organization as a whole. This means that the personal interaction of customers with sales assistants carries a lot of weight and may positively influence the next decision to patronize the company's passenger bus service or dissuade customers from making the next patronage. Realizing the impact of this, management must ensure that sales assistants always have a smile on their face to make customers know that they are there because of the company's customers. Such customer relations are

invaluable and its impact can reap long-term benefits for the company. The customer feels important and happy and keeps returning to patronize Intercity STC Coaches Ltd. passenger bus service and the company stays in business and enjoys its profits.

Nonetheless, the item with the lowest coefficient of variation represents the human relations of drivers. This constitutes 19% of respondents expressing their dissatisfaction, whereas 71.4% of respondents expressed their satisfaction, with the remaining number of respondents not personally interacting with any of the drivers, and could therefore not express satisfaction or dissatisfaction. This indicates that the training and education provided for Intercity STC's drivers has had a positive impact on the drivers, making them competent and professional, and subsequently, adding to the quality of service delivery. This is an added advantage for the Intercity STC Coaches Ltd., because it will not be easy for their competitors to mimic this uniqueness. However, in their efforts to do so, the same level of professionalism may never be achieved. These findings also buttress the point that the competence and professionalism of Intercity STC Coaches Ltd. drivers has contributed to the company's known reputation of safety over the years.

In order to explain the relatively high variation in empathy as compared to assurance, the four items used to measure the quality of assurance were assessed. The analysis showed two out of the four items had a relatively high coefficient of variation of 36.4% and 40.5% as shown in table 4.12 (refer to appendix 7). These two items; D1 and D4 represent the entertainment provided during and before the journey respectively.

The variations in these two items suggest that, customers may not value or enjoy the type of entertainment being provided and may therefore not even consider it as entertainment. Alternatively, Intercity STC Coaches Ltd. may not be making maximum use of the available entertainment channels it has, and this may result in the repetition of certain programs. For customers who travel frequently within the year, meeting these same programs being broadcasted over and again on the company's entertainment set would eventually let customers arrive at the impression that entertainment provided is boring. However, even though customers are to wait for a relatively short time for their passenger bus service, the entertainment provided at the waiting lounge should be exciting. The excitement from the entertainment will further make their waiting period for their bus service seem relatively short, as customers will be preoccupied with the entertainment provided.

4.5 Overall Quality of Service Delivery

After assessing the individual dimension of service quality, customers were asked to rate the overall quality of service delivery. From figure 4.3, 5.8% of respondents think that the quality of service delivery is excellent; approximately 65% of customers think that the quality of service delivery is good. This figure accounts for more than half the sample size, with 0.9% accounting for very poor service. This figure is less than 1% of the entire sample and can be considered to be relatively small. However, the remaining 24.3% of customers think that the quality of service delivery is fair. This figure also represents almost a quarter of the sample size and therefore can be considered to be relatively substantial. These figures indicate that the services provided partly meets the needs of more than half of the respondents, yet it does not

exceed their expectations. Furthermore, it suggests a need for improvement in the quality of service delivery.

Title: A graph showing customer perception of the quality of service delivery

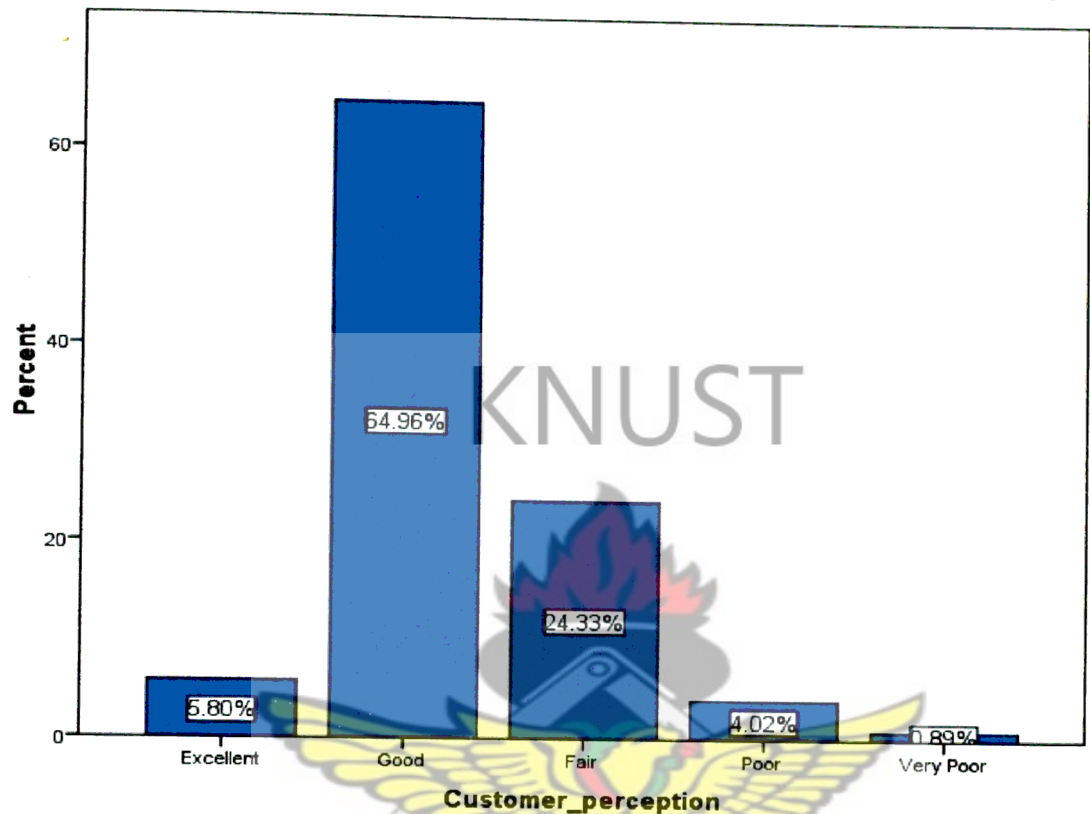


Figure 4.3 Customer perceptions of the quality of service delivery
Source: Researchers fieldwork

On the other hand, it may suggest that although management is making efforts to improve the quality of service delivery, these improvements have not been recognized by customers. This could either be because, these improvements are not of significant value to customers, or that these improvements have not significantly improved the quality of service delivery. This further implies that, if management is to take steps in improvement of service delivery, these improvements should be tailored to focus on what customers consider as added-value to the service delivery process.

4.5.1 The Need for Improvement

Further analysis from the customer satisfaction survey showed that, of 448 respondents, 425 expressed the need for the company to improve its passenger bus service. This number represents 94.9% of the sample as indicated in table 4.5 below, which is relatively high. This indicates that certain essential needs of the company’s customers are not being met.

Table 4.5 Customer perceptions on the need for an improvement in the quality of service delivery

Need for Improvement		Frequency	Percent	Cumulative Percent
Valid	Yes	425	94.9	94.9
	No	23	5.1	100.0
	Total	448	100.0	

Source: Researchers fieldwork

Furthermore, it points to the fact that customers who patronize the passenger bus service of the company are very demanding. However only, 23 respondents, representing 5.1% of the sample did not see the need for the company to improve its services. This percentage is relatively small and could be as a result that the outcome of service delivery equals or probably exceeds these customers’ expectations. On the other hand, it suggests these respondents are not demanding and will therefore settle for anything that Intercity STC Coaches Ltd. offers. The relatively large percentage of respondents who think the quality of service delivery should be improved, confirm the fact that improvement is not a one-time effort and continuous improvement is essential if Intercity STC Coaches Ltd. is to meet and exceed customer satisfaction.

4.6 Competition

Figure 4.4 shows the competitors of Intercity STC Coaches Ltd. From the customer satisfaction survey undertaken, 30.8% of respondents who did not always travel with the company’s passenger bus service opted for the services of Intercity STC Coaches’ competitors.

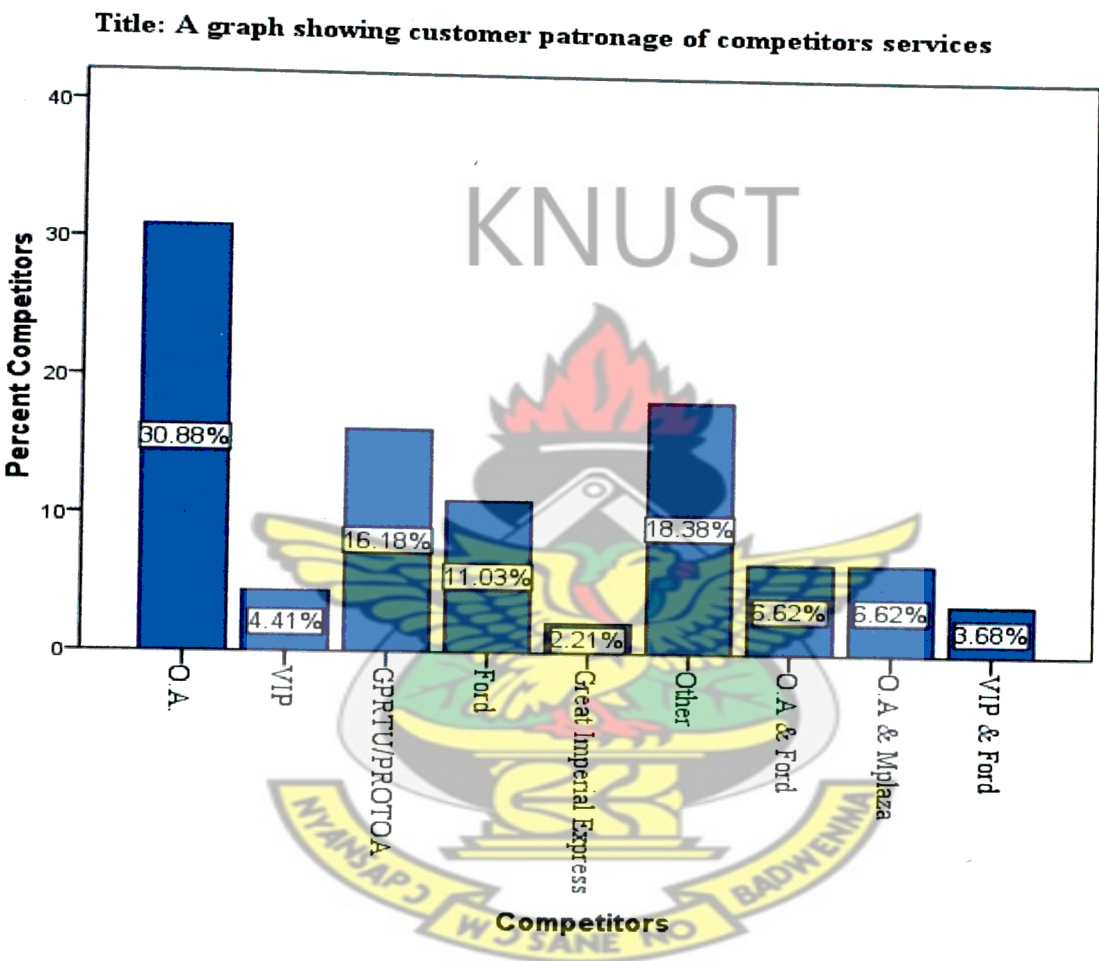


Figure. 4.4 Competitors of Intercity STC Coaches Limited
Source: Researchers fieldwork

From figure 4.4, O.A travel and tours is the major competitor of Intercity STC Coaches with a patronage of 30.88 %, followed by 18.38% for “Others”; consisting of Metro Mass Transit Ltd., Antrak and private vehicles. However, private vehicles are considered as indirect competition in this study.

This has highly significant managerial implications for the company. If O.A. travel and tours is able to fully satisfy the 30.8% respondents, they will quickly switch to using its services. This could result in a reduction in the company's current customers and a possible loss of the acquisition of potential customers. Ultimately, this would greatly affect Intercity STC Coaches Ltd. market share.

The percentage of 30.8 represents customers who solely use the services of O.A as an alternative. 16.18% of customers also prefer the passenger bus services of GPRTU/PROTOA as an alternative to Intercity STC Coaches Ltd. However, 6.62% represents customers who patronize both O.A and Ford, and O.A. and Mplaza each.

These figures indicate that the competition among the three passenger bus service providers; O.A, GPRTU/PROTOA and Ford is very keen. It also gives the impression that customers are developing a preference for the services of these competitors. This further suggests that the services being provided by Intercity STC's major competitors are being tailored to meet the needs and demands of customers. On the other hand, it gives an indication that Intercity STC Coaches may be compromising on certain essential service quality dimension which may be of high value to customers. The danger here is that if the company's competitors are able to give customers added-value in service delivery, these customers will switch from Intercity STC Coaches Ltd. passenger bus service and by word of mouth, draw other customers from Intercity STC Coaches Ltd.

To confirm if customers would switch from services because of the quality of service delivery rather than price, customers were asked to rate the fares that Intercity STC Coaches charge and whether they would continue to use the company's services

despite the fares being charged. Table 4.6 shows a relatively small percentage of 4.5 respondents who would not continue to use Intercity STC’s passenger bus services as a result of price. Contrary to this, 95.5% of respondents were willing to continue using the company’s passenger bus service despite the fares being charged. This confirms a study from Evans and Lindsay (2005) which found that customers are five times likely to switch because of service problems than for price concerns.

Table 4.6 Customer decisions to patronize services based on fares charged

			Patronage		Total
			Yes	No	
Fares	Very Expensive	Count	57	4	61
		% within Fares	93.4%	6.6%	100.0%
	Expensive	Count	177	8	185
		% within Fares	95.7%	4.3%	100.0%
	Moderate	Count	192	8	200
		% within Fares	96.0%	4.0%	100.0%
	Cheap	Count	2	0	2
		% within Fares	100.0%	.0%	100.0%
Total	Count	428	20	448	
	% within Fares	95.5%	4.5%	100.0%	

Source: Researchers fieldwork

4.7 Critical Elements of TQM

Questionnaires administered to the top management of Intercity STC Coaches Ltd. showed that all 11 critical elements for the implementation of total quality management were present. However the variance for three of the eleven elements was zero, indicating a high consistency and therefore, the mean, standards deviation and coefficient of variation for the remaining eight TQM critical elements were calculated as shown in table 4.7. The critical elements were paired according to their

how closely related they were and their coefficients of variation were compared and discussed.

Table 4.7 Results of the mean, standard deviation and coefficient of variation for eight (8) TQM critical elements.

TQM Critical Elements	Mean	Standard deviation	Coefficient of variation %
Scientific approach	4.75	0.447	9.4
Education & training	4.5	0.534	11.9
Unity of purpose	4.167	0.577	13.8
Strategically-based	4.464	0.637	14.3
Employee involvement & empowerment	4.125	0.641	15.5
Customer focus	4.406	1.042	23.6
Obsession with quality	4.188	1.023	24.4
Freedom through control	3.625	1.408	38.8

Source: Researchers field work

4.7.1 Assessment of Education & Training and Scientific Approach

From table 4.7 above, the coefficient of variation for education and training is 11.9%, whereas that for scientific approach is 9.4%. This suggests that the variability in the implementation of education and training is relatively higher as compared to implementing a scientific approach. The nature of service delivery that the company renders implies that the element of education and training should include sales assistants, loaders, technicians and drivers, as well as other front line personnel and all other personnel. Furthermore, this should extend to training for the maintenance of new buses. In a situation where buses are not standardardized for all routes, training

for the different brands of buses must be provided to ensure that buses are serviced properly to prevent breakdowns during the journey. This element covers a very broad area, but cannot all be implemented at once. Therefore it is pertinent for management to consider the areas of priority that have a huge impact on service delivery and invest more resources into these areas. The inconsistency in implementation may be due to the fact that TQM is being implemented in phases and therefore, management may focus more on areas that they considered crucial to the improvement of the service delivery process. Also, a lack of resources may account for a slow pace in education and training of staff in certain departments as compared to others.

KNUST

The CV of 9.4% for scientific approach which is relatively lower than that for education and training may imply that management places more focus on benchmarking their processes and services with their competitors. Furthermore, it may also imply that appropriate structures have been laid down to ensure the effective implementation of this element.

4.7.2 Assessment of Obsession with Quality and Customer Focus

The element obsession with quality has a relatively higher CV of 24.4% as compared to customer focus which is 23.6% as shown in table 4.7. The difference of 6.7% could probably be due to a relatively high level of implementation of systems that have been put in place to address customer complaints to be subsequently used to improve the processes in service delivery. Although these systems may be in place, the level of awareness from customers may be relatively low, and therefore even though this system is currently available, it is not being put to optimal use.

A higher CV in obsession with quality suggests that, although the company has a customer focus, the implementation of quality initiatives may not be performed regularly. This may be due to a partial commitment from management of Intercity STC Coaches Ltd. or lack of financial resources to fully support these initiatives.

4.7.3 Assessment of Employee Involvement & Empowerment and Freedom through Control

From table 4.7, although the CV for employee involvement and empowerment is relatively lower than the CV for freedom through control by 23.3%, one would expect these two elements to have CVs that are much closer together, due to their closely related nature. The relatively low CV of employee involvement indicates a low variability in implementation. This may be as a result of effective systems in place to encourage employee participation and facilitate rewards.

However, the relatively high variability in freedom through control may be as a result of limitations in the extent to which employees are involved in decision making. This is very important especially when decisions being made have a direct impact on an employees' jobs and yet are taken without any input from employees. The variability could also result from a restriction of authority.

4.7.4 Assessment of Unity of Purpose and Strategically based

From table 4.7, the variability in unity of purpose (13.8%) may be relatively smaller because the vision and mission of the company has been effectively communicated by top management and understood by personnel. It could also be an indication of a

highly committed workforce who understand how their attitudes and behaviours impact the quality of service delivery.

On the other hand, the relatively high CV of 14.3% of the element strategically based may be as a result of inadequate resources available in working towards strategies focused on quality. Secondly, it could also be as a result of a slow pace in implementation of strategies. This implies that although quality goals and objectives will be achieved, it will take a relatively longer period of time before these results are seen.

KNUST

4.8 Impact of TQM critical elements on service quality

In order to determine the association between the critical elements of TQM and the quality of service delivery, a chi square test was performed. From table 4.13 the chi square value of the element strategically based was 0.166 at a significance level of 0.684 (refer to appendix 8). This means that the probability of these results occurring by chance alone was more than 0.05 and therefore we can conclude that the relationship between this TQM element and the quality of service delivery is likely to be explained by chance factors. However the value of Phi which was -0.124 suggests a negative association between the TQM element strategically based and the quality of service delivery (refer to appendix 8).

These findings were similar for the following TQM elements; customer focus, long term commitment and freedom through control which each had chi square values of 0.492, 0.574 and 3.492 at significance levels of 0.483, 0.449 and 0.064 respectively (refer to appendix 9, 10, and 11 respectively). The associated Phi values for customer

focus and long term commitment were both negative suggesting a negative relationship between these two elements and the quality of service delivery. Although the Phi value for the element freedom through control was positive, it was not statistically significant. According to Saunders et. al., (2007), a probability of 0.05 or less is statistically significant.

However, the chi square values for the elements obsession with quality, unity of purpose and employee involvement were 6.400, 5.455 and 8 at significance levels of 0.011, 0.02 and 0.005 respectively (refer to appendix 12,13, and 14). This means that the probability of these results occurring by chance alone for the elements; obsession with quality, unity of purpose and employee involvement and empowerment was less than 0.05. According to Saunders et. al., (2007), this suggests that the relationship between the TQM elements obsession with quality, unity of purpose and employee involvement and empowerment and the quality of service delivery is unlikely to be explained by chance factors, with at least 95% certainty. Phi and Cramer's V value for employee involvement and empowerment shows that there is a perfect positive association between this element and the quality of service delivery. According to Saunders et. al.(2007), if the value of Phi is 1, it suggests a perfect association between the two variables in question. Also, a Cramer's V value of 1 indicates a perfect association between two variables. This means that focusing more on this element will contribute to an enhancement in the quality of service delivery.

Although the Phi values for obsession with quality and unity of purpose was not 1, Cramer's V value for these two elements indicates a relatively strong association between these two elements and the quality of service delivery.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter contains a summary of the findings from the analysis in the previous chapter and provides an overview of the managerial implications for the company. It also makes suggestion on what can be done in order to improve the quality of service delivery and consequently customer satisfaction.

5.2 Summary of Findings

In order to measure the quality of service delivery of Intercity STC Coaches Limited, a customer satisfaction survey was conducted. Generally customers of Intercity STC Coaches Ltd. think that the quality of service delivery of the passenger bus service is good. This suggests that the company is taking steps to closer achieve its vision and mission of becoming the best transport provider. Although a relatively large percentage of customers have a positive perception about the company's passenger bus service, keen competition in the road transport industry implies that management must be proactive in taking necessary steps to stay ahead of the competition. However, 94.87% of respondents expressed a need for the quality of service delivery to be improved in order to make their overall service experience a total delight. Delivering quality services is essential in customer satisfaction and should therefore not be compromised if the company is to gain a competitive advantage.

With respect to the five SERVQUAL dimensions that were considered for service quality, results showed that all five were not delivered consistently. However,

reliability, tangibles and empathy seem to be of more concern to customers of Intercity STC Coaches Ltd. during delivery of quality services.

Apart from the five SERVQUAL quality dimensions, 58.33% of customers think that the passenger bus service is safer as compared to other transport provides, thus building the trust of customers. Based on this figure, it can be concluded that the company is investing more resources in providing the necessary training for its drivers. Although the image of safe services has been positioned in the mind of customers, the company must increase its effort to reposition the quality of its services in the minds of customer as being not only safe, but reliable.

The study showed that the 11 critical elements proposed by Goetsch and Stanley (2006) for total quality implementation, were all present in the company's TQM implementation. However, the analysis showed that there were variability in the implementation of eight of these elements, with only three; teamwork, long-term commitment and continual process improvement being consistently implemented.

The findings from the chi square test between TQM and service delivery also indicated that three elements; obsession with quality, employee involvement and empowerment and unity of purpose had a positive association with the quality of service delivery. Of these three elements employee involvement and empowerment had a perfect association with the quality of service delivery. This implies that employee participation plays a crucial role in the contribution of quality to service delivery. They could either have a positive or negative effect on the quality of service delivery depending on their attitudes towards their jobs. The nature of service delivery

at Intercity STC Coaches Limited requires the involvement of employees at every stage in the service delivery process; from assistance with luggage, issuing out of tickets, weighing and packing of luggage, and cleanliness of the compound and other facilities just to mention a few.

Obsession with quality is extremely crucial because quality has no destination. In the midst of fierce competition in the road transport sector, this element will be the springboard in providing Intercity STC Coaches with an edge over its growing competitors and therefore measures should be put in place to ensure that cost is not compromised for quality in the delivery of services. This element will also encourage creativity from employees in contributing to improvement in quality.

In the company's effort to incorporate quality in every aspect of service delivery and work processes, unity of purpose will play a significant role in helping Intercity STC Coaches achieve this. This supports the work of Rahman and Bullock (2002), suggesting that workforce commitment is significantly related to customer satisfaction, employee morale and productivity.

5.3 Recommendations

The recommendations for this study are in two parts; the first is related to the implementation of total quality management and the second part focuses on ways to improve the quality of service delivery of the passenger bus service of Intercity STC Coaches Ltd.

Total Quality Management

- Although three of the eleven elements of TQM impact the quality of service delivery, it does not undermine the importance of the remaining eight because, TQM is a strategy that fully brings out benefits over a long-term depending on the maturity of implementation. However, it will be necessary for management to assess the impact of each phase of TQM implementation on the quality of service delivery and customer satisfaction.
- The management of Intercity STC Coaches Ltd. should try to consistently implement practices that relate to all eleven elements of TQM as this would greatly impact customer satisfaction.
- Customers need to be made fully aware of the existence of systems through which they can channel their complaints, if these systems are to be effectively utilized to obtain feedback from customers to serve as input into the service delivery process,

Service Delivery

The following were the major suggestions that customers put forward in order to improve their overall service experience and make their travel with the company's passenger bus service a delight;

- Introduction of advance tickets online and extension of the period of time allowed for booking advanced tickets. This is to reduce the rush for tickets during peak periods, ensure that customer demands are met and improve customers traveling plans.
- Branding of uniforms for loaders to make them look more professional and easily identifiable. If possible, name tags should be provided for both loaders

and sales assistants as this would provide a more professional touch and also make complaints to the help desk more specific.

- Renovation of parking lots for private vehicles that are parked at the Intercity STC Coaches yard, for customers traveling overnight. This will enhance the security of passenger vehicles and enhance the image of the company as well.
- Renovation of the waiting lounge, especially the provision of more comfortable seats, as well as the renovation of the washroom to enhance customer care.
- Prompt departure of passenger bus services scheduled for the various routes.
- Reschedule of departure times for passenger bus services to avoid delays to customers traveling.
- Information from the help desk or sales assistants should be announced in more than two languages if possible as the number of foreigners using the passenger bus service of the company is increasing relatively. Also, the frequency with which announcements are made should be increased.

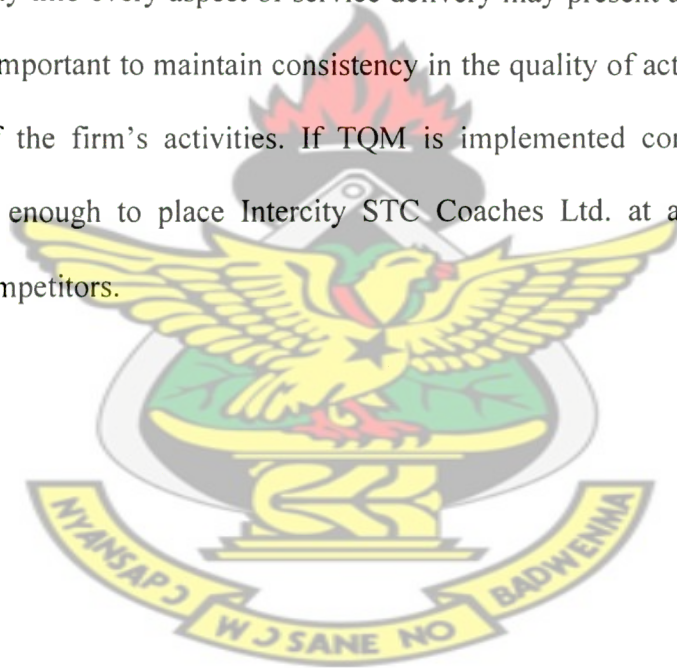
5.4 Conclusion

In today's competitive business environment, organizations are searching for innovative ways to achieve competitive advantage and increase customer loyalty. Confronted with these challenges, the long-term success of Intercity STC Coaches Ltd. in the competitive road transport industry of Ghana will be determined by the company's ability to maintain and expand its customer base through customer satisfaction and loyalty. However, it is essential to recognize that sustaining a satisfied and loyal customer is not a one time effort, but a process which leads to better

outcomes, which each outcome better than the previous. Thus the importance of continuous improvement cannot be over emphasized.

The company must therefore tailor its TQM efforts to improve the dimensions of service quality such as reliability, empathy and tangibles, and provide consistent superior services that add value to the quality of services delivered, or run the risk of losing out to competitors.

This study highlights the importance of customer satisfaction in gaining competitive advantage through the implementation of total quality management. Although the integration of quality into every aspect of service delivery may present a challenge to management, it is important to maintain consistency in the quality of activities within the value chain of the firm's activities. If TQM is implemented consistently, its benefits would be enough to place Intercity STC Coaches Ltd. at a competitive position over its competitors.



REFERENCES

- Ahire, S., Golhar, D., Waller, M. (1996). "Development and validation of TQM implementation constructs". *Decision Sciences*; Vol. 27, No. 1, pp. 23-56.
- Anderson, J.C., Rungtunsanatham, M., Schroeder, R.G. (1994). *A Theory of Quality Management Underlying the Deming Management Method*. *Academy of Management Review*, Vol. 19, No.3, 472-509.
- Armistead, C., Clark, G. (1992). *Customer Service and Support*, Pitman, London.
- Berry, L.L., Parasuraman, A. (1991), *Marketing Services: Competing Through Quality*, Free Press, New York, NY.
- Bowen, J.T., Chen, S. (2001). The relationship between customer loyalty and customer satisfaction. *International Journal of Contemporary Hospitality Management* 13/5, pp 213±217
- Brocka, B., Brocka, S. (1992). *Quality Management: Implementing the best ideas of the masters*. Homewood, IL: Business One Irwin.
- Chen, C., Lee, H. (2008). Empirical Analysis of the Customer Loyalty Problem in the International Logistics Market, issue 4, vol 5
- Chowdhary, N., Prakash, M. (2007). Prioritizing service quality dimensions, *Managing Service Quality*, Vol. 17 No. 5, pp. 493-509
- Covin, G.J., Miles, M.P. (1999). "Corporate Entrepreneurship and the pursuit of Competitive Advantage". *Entrepreneurship Theory and Practice* Vol. 23, No. 3 pp. 47-63
- Dale, B.G., Cooper, C.L. (1994). "The role of senior management". *Management Decision*, Vol. 32 No.1, pp.20-6.

- Davis, M.M., Aquilano, N.J., Chase, R. (2003). *Fundamentals of Operations Management*, 4th edition, McGraw-Hill/Irwin
- Dean, J.W., Evans, J.R. (1994). *Total Quality: Management, Organization and Strategy*, St. Paul, West, MN.
- Deming, W.E. (1986). *Out of the Crisis*. Cambridge: Massachusetts Institute of Technology, Centre for Advanced Engineering Study.
- Escrig-Tena, A.B., (2004). TQM as a competitive factor; A theoretical and empirical analysis, *International Journal of Quality & Reliability Management*, Vol. 21 No. 6, pp. 612-637
- Evans, J.R., Lindsay, W.M. (2005). *The Management and Control of Quality*, 6th edition, South-Western, Thomson.
- Fitzsimmons, J.A., Fitzsimmons, M.J. (2001). *Service Management: Operations, Strategy and Information Technology*, 3rd edition, Irwin/McGraw-Hill.
- Gatchalian, M.M. (1997). People empowerment: the key to TQM success, *The TQM Magazine*, Vol. 9, No. 6, pp. 429-433
- Garvin, D.A. (1988). *Managing Quality, The Strategic and Competitive Edge*. Collier Macmillan.
- Getty, J.M., Thompson, K.N. (1994). The relationship between quality, satisfaction, and recommending behaviour in lodging decision, *Journal of Hospitality & Leisure Marketing*, Vol 2, No. 3, pp.3-22
- Ghana Investment Promotion Centre, Ghana Investment Profile; Roads and Transportation. www.gipc.org.gh [accessed 9th February, 2009].
- Goetsch, D.L., Stanley, B.D. (2006). *Quality Management; Introduction to Total Quality Management for Production, Processing and Services*

- Gupta, A., McDaniel, J.C., Herath, S.K. (2005). Quality management in service firms: sustaining structures of total quality service. *Managing Service Quality*, Vol. 15, No. 4, pp. 389-402
- Hames, R.D. (1991). "Total quality management; the strategic advantage", *International Journal of Physical Distribution & Logistics Management*, Vol. 21 No. 4
- Hendricks, K.B., Singhal, V.R. (1997), "Does implementing an effective TQM program actually improve operating performance? empirical evidence from firms that have won quality awards", *Management Science*, Vol. 43, pp. 1258-74.
- Hirons, E., Simon, A., Simon, C. (1998). External customer satisfaction as a performance measure of the management of a research and development department. *International Journal of Quality & Reliability Management*, Vol. 15, No. 8/9, pp. 969-987. MCB University Press
- Huq, Z. (2006). Six-Sigma Implementation through Competency Based Perspective (CBP), *Journal of Change Management*, Vol. 6, No. 3, 277-289
- Jeffries, D., Evans, B., Reynolds, P. (1996). *Training for Total Quality Management*, 2nd edition, Kogan page.
- Joiner, T.A. (2007). TQM and Performance; the role of organization support and co-worker support, *International Journal of Quality and Reliability Management*, Vol. 24, No. 6, pp. 617-627
- Jung, J.Y., Wang, Y.J., and Wu, S. (2009). Competitive strategy, TQM practice, and continuous improvement of international project management, A contingency study, *International Journal of Quality & Reliability Management* Vol. 26 No. 2, pp. 164-183

- Juran, J.M. and Gryna, F.M. (1988) *Juran's Quality Control Handbook*, 4th edition, New York: McGraw-Hill.
- International Monetary Fund, (2007). *Ghana: Selected Issues*, IMF Country Report No. 07/208
- Kandampully, J., Suhartanto, D. (2000). Customer loyalty in the hotel industry: the role of customer satisfaction and image. *International Journal of Contemporary Hospitality Management* vol. 12, No. 6, pp 346-351.
- Kaplan, R., Norton, D. (1992). "The balanced scorecard ± measures that drive performance", *Harvard Business Review*, Vol. 70 No. 1, pp. 71-9.
- Ke, Q., Isaac, D., Dalton, P. (2008). The determinants of business performance of estate agency in England and Wales, *Property Management*, Vol. 26 No. 4, pp. 255-272
- Khan, J.H. (2003). Impact of Total Quality Management on Productivity, *The TQ Magazine*, Vol. 15, No. 6, pp. 374-380
- Kline, R. (1998). *Principles and Practice of Structural Equation Modeling*, Guilford Press, New York, NY.
- Kotler, P., Keller, K. L. (2006). *Marketing Management*. 12th edition, Pearson Prentice Hall.
- Lindner, J.R. (1998). Total Quality Management and Effective Extension Teaching, *Journal of Extension*, Vol. 36, No. 2
- Longnecker, C.O., Scazzero, J.A. (1996). The ongoing challenge of total quality Management, *The TQM Magazine*, Vol. 8, No. 2, pp. 55–60

- Lovelock, C., Wirtz, J. (2007). Services marketing; people, technology, strategy, 6th edition. Pearson Prentice Hall.
- Macdonald, J., Piggot, J. (1992). Global Quality: The new management culture, Mercury Books.
- McAdam, R., and Henderson, J., (2004). Influencing the future of TQM: internal and external driving factors, International Journal of Quality & Reliability Management, Vol. 21 No. 1, pp. 51-71
- Metri, B.A. (2006). Total Quality Transportation through Deming's 14 Points, Journal of Public Transportation, Vol. 9, No. 4.
- Millennium Cities Initiative (2008). Invest in Ghana: Focus Kumasi. <http://www.earth.columbia.edu/millenniumvillages> (Accessed on 30th March 2009).
- Motwani, F.G., Frahm, M.L., Kathawala, Y. (1994). Achieving a competitive advantage through Quality Training, Training for Quality, Vol. 2, No. 1. pp. 35-40
- Ngole, N.B., Munir, H. (2008). Total quality management as a competitive advantage – from a marketing perspective. Halmstad University (Unpublished report).
- Nilsson, L., Johnson, M.D., Gustafsson, A. (2001), "The impact of quality practices on customer satisfaction and business results: product versus service organizations", Journal of Quality Management, Vol. 6, pp. 5-27.
- Oakland, J.S. (1994). Total Quality Management: The Route to Improving Performance, Second Edition. Butterworth Heinemann, London.
- Patel, A. (1995). The long view of total quality management pays off, International Journal of Quality & Reliability Management, Vol. 12, No. 7, pp. 75-87.

- Peters, J.J., Waterman, R.H. (1982). In search of excellence: Lessons from America's Best-Run Companies, Harper and Row.
- Petersen, P.B (1999). Total quality management and the Deming approach to quality management, *Journal of Management History*, Vol. 5, No. 8, pp. 468-488
- Pine, J., Gilmore, J. (1998). Welcome to the Experience Economy, *Harvard Business Review*, pp.97-105.
- Porter, M. (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, New York, NY.
- Prajogo, D.I., Sohal, A.S. (2003). The relationship between TQM practices, quality performance, and innovation performance; An empirical examination, *International Journal of Quality & Reliability Management*, Vol. 20 No. 8, pp. 901-918
- Pun, K., Ho, K. (2001). Identification of service quality attributes for restaurant operations: a Hong Kong case. *Managing Service Quality*, Vol 11, No 4, pp. 233±240
- Rahman, S., Bullock, P. (2002). Relationships between soft TQM, hard TQM and Organizational performance. Working Paper ITS-WP-02-10.
- Rahman, Z. (2004). Developing customer oriented service: a case study, *Managing Service Quality*, Volume 14 · Number 5 · pp. 426–435
- Reichheld, F., Sasser, W.E. (1990), "Zero defections: quality comes to services", *Harvard Business Review*, Vol. 68 September/ October, pp. 105-11.
- Reinartz, W.J. and Kumar, V. (2000), "On the profitability of long-life customers in a non-contractual setting: An empirical investigation and implications for marketing", *Journal of Marketing*, Vol. 64 No. 4, pp. 17-36.

- Richardson, T. R. (1997). Total quality management. Albany, NY: Delmer Publishers.
- Richardson, T. R. (2006). Competitive advantage: The effect of market competition on the formation of strategy in small business school higher education, University of Pennsylvania (Unpublished report).
- Samat, N., Ramayah, T., Saad, N.M., (2006). TQM practices, service quality, and market orientation. Some empirical evidence from a developing country. Management Research News Vol. 29 No. 11, pp. 713-728
- Sandholm, L. (2000). Total Quality Managing. IAQ Book Series Vol. 11.
- Saunders, M., Lewis, P., Thornhill, A. (2007). Research Methods for Business Students, 4th edition. FT Prentice Hall.
- Shenawy, E.E., Baker, T., Lemak, D.J., (2007). A meta-analysis of the effect of TQM on competitive advantage, International Journal of Quality & Reliability Management, Vol. 24 No. 5, pp. 442-471
- Silverman, L.L., Prospt, A.L. (1999). Quality Today: Recognizing the Critical SHIFT, Quality Progress, pp.53-60.
- Slack, N., Chambers, S., Jonhston, W., Betts, A. (2006). Operations and Process Management; Principles and Practice for Strategic impact, FT Prentice Hall
- Smith, C.V. (1999). Total Quality Management, Global Journal of Engineering Education., Vol. 3, No. 1
- Stevenson, J.W. (2007). Operations Management International Student Edition with global readings, 9th edition. McGraw-Hill/Irwin
- Tam, J.L.M., (2007). Linking quality improvement with patient satisfaction: a study of a health service centre, Marketing Intelligence & Planning Vol. 25 No. 7, pp. 732-745

- Taylor, W.A., and Wright, G.H., (2003). The impact of senior managers' commitment on the success of TQM programmes; An empirical study, *International Journal of Manpower* Vol. 24 No. 5, pp. 535-550
- Terziovski, M. (2006). Quality management practices and their relationship with customer satisfaction and productivity improvement. *Management Research News*, Vol. 29 No. 7, pp. 414-424
- Thompson, A.A., Strickland, A.J III., Gamble, J.E. (2005). *Crafting and Executing Strategy; The Quest for Competitive Advantage, Concepts and Cases*, 14th edition, McGraw-Hill/ Irwin.
- Uncles, M.D., Dowling, D.R., Hammond, K. (2003), "Customer loyalty and customer loyalty programs", *Journal of Consumer Marketing*, Vol. 20 No. 4, pp. 294-316.
- Warren, K. (2002). *Competitive Strategy Dynamics*, John Wiley and Sons Limited.
- Wiele, T.V.D., Boselie, P., Hesselink, M. (2002). Empirical evidence for the relationship between customer satisfaction and business performance, *Managing Service Quality*, Vol 12, No. 3, pp.184-193 MCB UP Ltd
- Wit, B., Meyer, R. (2005). *Strategy synthesis: Text and reading*, 2nd edition, Thomson Publishing.
- Yasin, M.M., Alavi, J., Kunt M., Zimmerer, T.W. (2004). TQM practices in service organizations: an exploratory study into the implementation, outcome and effectiveness. *Managing Service Quality*, Vol. 14, No 5, pp. 377-389
- Yucelt, U. (1994). "An investigation of causes of patient satisfaction/dissatisfaction with physician services", *Health Marketing Quarterly*, Vol. 12 No. 2, pp. 11-27.

- Zaid, A.M. (1995). Measuring and monitoring service quality at Malaysia Airlines, *Managing Service Quality*, Vol 5, No. 2. pp. 25-27, MCB University Press
- Zairi, M., Hutton, R. (1995). Benchmarking: a process-driven tool for quality improvement, *The TQM Magazine* Vol. 7, No.3, pp. 35–40.
- Zeithaml, V., Berry, L., Parasuraman, A. (1990). *Delivering Service Quality*, New York Free Press, New York, NY.
- Zeithaml, V., Berry, L.L., Parasuraman, A. (1996). “The behavioral consequences of service quality”, *Journal of Marketing*, Vol. 60, pp. 31-46.
- Zineldin, M. (2006). The royalty of loyalty: CRM, quality and retention, *Journal of Consumer Marketing*, Vol. 23, No.7, pp. 430–437





INFORMATION SHEET

Student: Dorinda Tham

Supervisor: Mr . Eric Fosu Oteng-Abayie

Total Quality Management: A strategy for achieving Organisational performance and Competitive Advantage. A case study of Intercity STC Coaches Limited.

Participants required: Customers who have travelled more than once with Intercity STC Coaches Limited and within the last two years.

This study is being undertaken as part of the requirements of a Masters degree in Business Administration. It will focus on the quality of service delivery by the company with reference to the perception that customers have about their services. Customers may have different service experiences which may influence their decision to travel with Intercity STC Coaches Ltd. This study seeks to assess the level of customer satisfaction to develop strategies to enhance the quality of service delivery.

Agreeing to participate in this study will require that you fill a short questionnaire which will take only 5 minutes. All answers provided will be treated with a high level of confidence and anonymity. Participation in this study is entirely voluntary.

All questions about this study can be directed to Dorinda Tham, telephone 024-4790251, email: tdorinda@hotmail.com

CUSTOMER SATISFACTION QUESTIONNAIRE

INTERCITY STC COACHES LIMITED

Please fill in the blank spaces and tick where applicable [√].

Destination:

Date of Interview: /06/2009

Time:

Personal profile

1. Gender

Male ☐

Female ☐

2. Age

Below 25 ☐

25-34 ☐

35-44 ☐

45-54 ☐

55 and above ☐

3. Marital Status

Single ☐

Married ☐

Other

General Information

4. How often do you travel in a year?

..... Time(s)

5. Do you always travel with Intercity STC Coaches Ltd?

Yes ☐

No ☐

6. If yes, please state why.

7. If no, which other service do you travel with?

Mplaza ☐

Ford ☐

O.A. ☐

Great Imperial Express ☐

VIP ☐

GPRTU/PROTOA ☐

Others

8. Please state why you travel with other services.

9. How long have you been travelling with Intercity STC Coaches?

NB: PLEASE INDICATE YOUR LEVEL OF SATISFACTION OR DISATISFACTION BY TICKING [✓] THE NUMBERS BELOW.

Extremely Dissatisfied Dissatisfied Not sure Satisfied Extremely satisfied

A. Tangibles

A1 It is easy to locate the company	1	2	3	4	5
A2 There is enough space for parking	1	2	3	4	5
A3 The waiting lounge is physically appealing	1	2	3	4	5
A4 The yard/compound is always clean	1	2	3	4	5
A5 Refuse bins are easily accessible	1	2	3	4	5
A6 The washroom is easily accessible	1	2	3	4	5
A7 The washroom is very clean	1	2	3	4	5
A8 Snacks are easily accessible in the yard	1	2	3	4	5
A9 The Sales Assistant is neatly dressed	1	2	3	4	5
A10 The Loader who assists with my luggage is neatly dressed.	1	2	3	4	5
A11 The driver is neatly dressed	1	2	3	4	5
A12 The physical appearance of the bus is appealing.	1	2	3	4	5
A13 Inside the bus is neat	1	2	3	4	5
A14 The seats are very comfortable	1	2	3	4	5
A15 The curtains are always clean	1	2	3	4	5
A16 The bus always has a wonderful aroma	1	2	3	4	5
A17 The bus is not stuffy	1	2	3	4	5

B. Assurance

B1 The Sales Assistant is friendly	1	2	3	4	5
B2 The Sales Assistant is polite	1	2	3	4	5
B3 The Loader who assists with my luggage is very friendly	1	2	3	4	5
B4 The driver is always friendly	1	2	3	4	5
B5 The driver is always polite	1	2	3	4	5
B6 When my bus delays, I am informed on time	1	2	3	4	5

C. Reliability

C1 My ticket is served quickly	1	2	3	4	5
C2 My details are correctly displayed on my ticket.	1	2	3	4	5
C3 My luggage is handled with care	1	2	3	4	5
C4 My luggage is always tagged after weighing	1	2	3	4	5
C5 The driver drives carefully	1	2	3	4	5
C6 The driver does not over speed	1	2	3	4	5
C7 The driver overtakes where necessary	1	2	3	4	5
C8 My bus leaves the Intercity yard at the scheduled time.	1	2	3	4	5

D. Empathy

D1 I am entertained while waiting for the scheduled bus.	1	2	3	4	5
D2 The Loaders always assist me with my heavy luggage.	1	2	3	4	5
D3 The driver is always willing to assist me	1	2	3	4	5
D4 I am entertained with movies throughout the entire journey.	1	2	3	4	5

E. Responsiveness

E1 I am always assisted when weighing my luggage.	1	2	3	4	5
E2 Adequate time is provided to refreshen up during the journey.	1	2	3	4	5

10. Will you continue to travel with Intercity STC? Yes ☐ No ☐

11. Will you recommend Intercity STC’s services to a friend/relative or colleague?
Yes ☐
No ☐

12. How will you rate your overall service experience?
Excellent ☐ Good ☐ Fair ☐ Poor ☐ Very poor ☐

13. Would you like Intercity STC Coaches Ltd. to improve their services to better meet your expectations?
Yes ☐
No ☐

Comment

14. If yes, what will you suggest to improve the service delivery of Intercity STC Coaches Ltd?
.....
.....

15. How will you assess STC’s fare?
Very expensive Expensive Moderate Cheap
☐ ☐ ☐ ☐

THANK YOU FOR YOUR PARTICIPATION IN THIS SURVEY.



INFORMATION SHEET

Student: Dorinda Tham

Supervisor: Mr . Eric Fosu Oteng-Abayie

Total Quality Management: A strategy for achieving Organizational performance and Competitive Advantage. A case study of Intercity STC Coaches Limited.

Participants required: Top management of Intercity STC Coaches Limited.

This study is being undertaken as part of the requirements of a Masters degree in Business Administration. The purpose of this questionnaire is to determine the level of implementation of 11 Total Quality principles within your organization, and to assess the impact of these practices on performance with emphasis on customer satisfaction.

Agreeing to participate in this study will require that you fill a short questionnaire which will take only 10 minutes. All answers provided will be treated with a high level of confidentiality and anonymity. Participation in this study is entirely voluntary.

All questions about this study can be directed to Dorinda Tham, telephone 024-4790251, email: tdorinda@hotmail.com

TOTAL QUALITY MANAGEMENT IMPLEMENTATION

INTERCITY STC COACHES LIMITED

Please read the statements carefully, before answering and write the number that best describes the level of implementation of the items below. Thank you for your participation.

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree).

A. Strategically-based

1. We have a policy on quality _____
2. Our policy on quality is clearly communicated to employees _____
3. Our vision, mission, and objectives are customer-oriented _____
4. Achieving quality is our priority _____
5. We allocate sufficient resources for the successful implementation of strategies focused on quality. _____
6. Our mission has a clear focus on quality _____
7. We embrace change as part of our organisation's culture. _____

B. Customer-focus

1. We recognise employees as internal customers. _____
2. We value feedback from employees. _____
3. We have a system that allows external customers to give us feedback on service delivery. _____
4. Customer complaints are addressed promptly. _____
5. Customer complaints are used as input to improve our processes. _____
6. We motivate our employees to achieve our quality goals _____
7. Customer satisfaction is our main focus _____
8. Employee satisfaction is formally measured yearly _____

C. Obsession with quality

1. Delivery of quality services is the sole responsibility of top management. _____
2. All employees are responsible for delivering quality services. _____
3. All levels of management get training on quality improvement _____

techniques.

4. We conduct customer satisfaction surveys yearly
5. We recognise quality improvement initiatives as an investment, not a cost.
6. We recognise that achieving quality is a never-ending process.
7. Process control and improvement is assessed yearly.
8. Customer needs are fully considered in service design and delivery.

D. Scientific Approach

1. We benchmark our key competitors'

Services

Processes

2. We monitor company performance quarterly
3. We audit our policies and plans on quality yearly

E. Long-term Commitment

1. Top management is committed to quality improvement initiatives.
2. Top management participates in quality management.
3. We have established a long-term relationship with our suppliers.
4. Our relationship with suppliers is based on price.
5. Our relationship with suppliers is based on quality.
6. Adequate resources are provided to improve service quality

F. Teamwork

1. We adopt a team approach such as cross-functional teams in problem solving and decision making
2. Cross-functional teams are used in formulating quality policies

G. Continual process improvement

1. We continuously work towards improving work processes.
2. Our buses are well maintained.
3. We conduct daily quality inspections of our buses.
4. We recognise that improvement is not a one-time effort.

H. Education and Training

- 1. Employees are trained in problem identification and solving skills _____
- 2. Employees are aware they influence the quality of service delivery. _____

I. Freedom through control

- 1. All employees are involved in decision-making process _____
- 2. We encourage new ideas from employees. _____

J. Unity of purpose

- 1. Our employees understands our vision, values and quality goals _____
- 2. Our employees are committed to achieving our quality goals _____
- 3. Employees support quality improvement initiatives _____

K. Employee involvement and empowerment

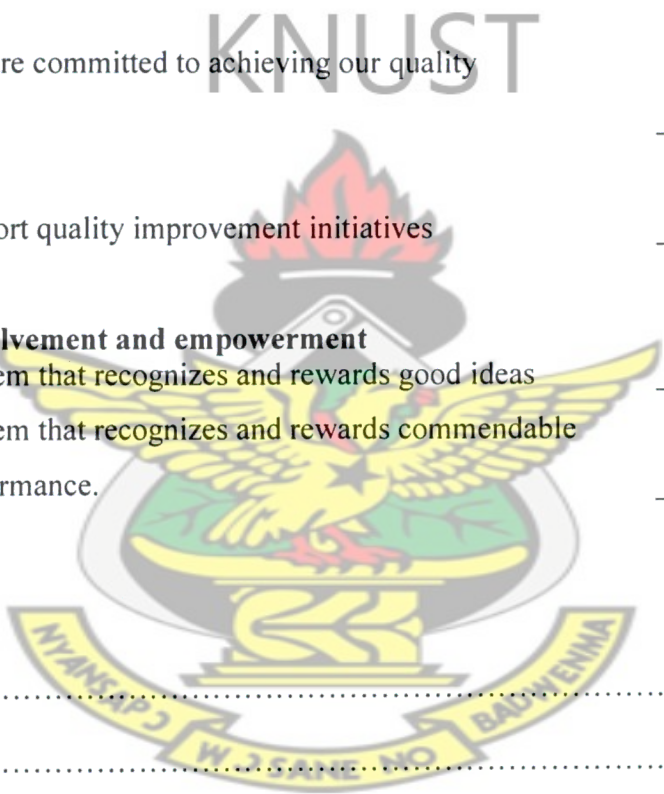
- 1. We have a system that recognizes and rewards good ideas _____
- 2. We have a system that recognizes and rewards commendable employee performance. _____

Comment (Optional)

.....

.....

.....



Appendix 3

Table 4.8 Descriptive Statistics for Reliability

	Mean		Std. Deviation	Variance	Coefficient of variation
	Statistic	Std. Error	Statistic	Statistic	%
C1	4.29	.038	.804	.646	18.7
C2	4.10	.044	.942	.887	23
C3	4.04	.038	.807	.652	20
C4	4.29	.032	.667	.445	15.5
C5	4.40	.030	.636	.405	14.5
C6	4.41	.029	.610	.372	13.8
C7	4.32	.035	.742	.550	17.2
C8	2.26	.058	1.233	1.520	54.6
Valid N (listwise)	448				

Source: Researchers fieldwork

Appendix 4

Table 4.9 Descriptive Statistics for Responsiveness

	Mean		Std. Deviation	Variance	Coefficient of Variation
	Statistic	Std. Error	Statistic	Statistic	%
E1	3.91	.037	.782	.612	20
E2	3.82	.050	1.058	1.119	27.7
Valid N (listwise)	448				

Source: Researchers fieldwork

Appendix 5

Table 4.10 Descriptive Statistic for Tangibles

	Mean		Std. Deviation	Variance	Coefficient of variation
	Statistic	Std. Error	Statistic	Statistic	%
A1	4.58	.025	.537	.289	11.7
A2	4.08	.038	.806	.649	19.8
A3	2.88	.054	1.147	1.316	39.8
A4	3.56	.049	1.037	1.074	29.1
A5	3.41	.046	.984	.967	28.9
A6	3.25	.046	.968	.937	29.8
A7	2.60	.046	.969	.939	37.3
A8	4.13	.027	.569	.323	13.8
A9	4.02	.035	.749	.561	18.6
A10	3.65	.048	1.019	1.039	27.9
A11	4.17	.033	.694	.481	16.6
A12	4.21	.030	.637	.406	15.1
A13	4.20	.030	.632	.400	15.0
A14	4.19	.037	.782	.612	18.7
A15	3.91	.043	.904	.818	23.1
A16	3.87	.036	.764	.584	19.7
A17	4.04	.030	.628	.395	15.5
Valid N (listwise)	448				

Source: Researchers fieldwork

Appendix 6

Table 4.11 Descriptive Statistics for Assurance

	Mean		Std. Deviation	Variance	Coefficient of variation
	Statistic	Std. Error	Statistic	Statistic	%
B1	3.61	.054	1.143	1.307	31.7
B2	3.65	.054	1.133	1.285	31.0
B3	3.79	.040	.852	.725	25.5
B4	4.14	.036	.767	.588	18.5
B5	4.17	.035	.739	.547	17.7
B6	2.83	.058	1.218	1.483	43.3
Valid N (listwise)	448				

Source: Researchers fieldwork

Appendix 7

Table 4.12 Descriptive Statistic for Empathy

	Mean		Std. Deviation	Variance	Coefficient of variation
	Statistic	Std. Error	Statistic	Statistic	%
D1	3.10	.059	1.256	1.578	40.5
D2	3.99	.031	.655	.429	16.4
D3	4.08	.037	.782	.612	19.2
D4	3.41	.059	1.241	1.541	36.4
Valid (listwise)	N 448				

Source: Researchers fieldwork

Appendix 8

Table 4.13 Chi-Square test for Strategically Based

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		.166 ^a	1	.684
Likelihood Ratio		.308	1	.579
Nominal by Nominal	Phi	-.077		.684
	Cramer's V	.077		.684
N of Valid Cases ^b		28		

Source: Researchers fieldwork

Appendix 9

Table 4.14 Chi-Square test for Customer Focus

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		.492 ^a	1	.483
Likelihood Ratio		.861	1	.354
Nominal by Nominal	Phi	-.124		.483
	Cramer's V	.124		.483
N of Valid Cases ^b		32		

Source: Researchers fieldwork

Appendix 10

Table 4.15 Chi-Square test for Obsession with Quality

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		6.400 ^a	1	.011
Likelihood Ratio		5.965	1	.015
Nominal by Nominal	Phi	.447		.011
	Cramer's V	.447		.011
N of Valid Cases ^b		32		

Source: Researchers fieldwork

Appendix 11

Table 4.16 Chi-Square test for Long Term Commitment

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		.574 ^a	1	.449
Likelihood Ratio		.981	1	.322
Nominal by Nominal	Phi	-.155		.449
	Cramer's V	.155		.449
N of Valid Cases ^b		24		

Source: Researchers fieldwork

Appendix 12

Table 4.17 Chi-Square test for Freedom through Control

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		3.429 ^a	1	.064
Likelihood Ratio		3.256	1	.071
Nominal by Nominal	Phi	.655		.064
	Cramer's V	.655		.064
N of Valid Cases ^b		8		

Source: Researchers fieldwork

Table 4.18 Chi-Square test for Unity of Purpose

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		5.455 ^a	1	.020
Likelihood Ratio		4.111	1	.043
Nominal by Nominal	Phi	.674		.020
	Cramer's V	.674		.020
N of Valid Cases ^b		12		

Source: Researchers fieldwork

Table 4.19 Chi-Square test for Employee Involvement

		Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square		8.000 ^a	1	.005
Likelihood Ratio		6.028	1	.014
Nominal by Nominal	Phi	1.000		.005
	Cramer's V	1.000		.005
N of Valid Cases ^b		8		

Source: Researchers fieldwork

