

**Service Quality and Customer Loyalty in the Ghanaian Automobile Service Industry - A Case Study of Toyota Ghana Company Limited**

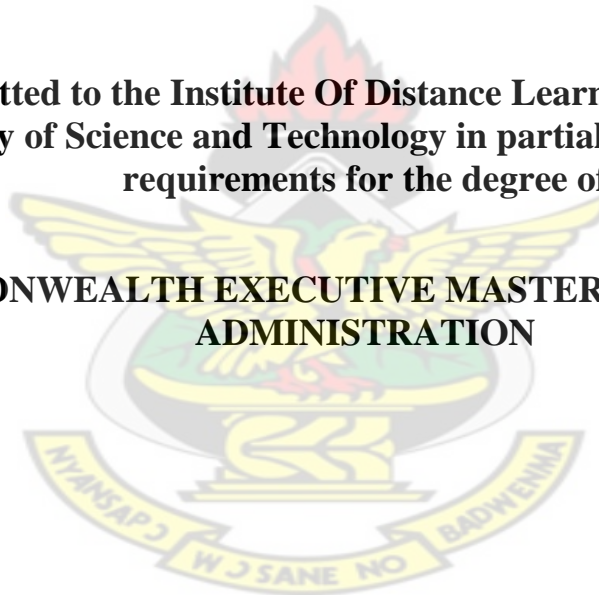
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**A thesis submitted to the Institute Of Distance Learning, Kwame Nkrumah  
University of Science and Technology in partial fulfillment of the  
requirements for the degree of**

**COMMONWEALTH EXECUTIVE MASTERS OF BUSINESS  
ADMINISTRATION**



**SEPTEMBER 2012**

## DECLARATION

I hereby declare that this submission is my own work towards the Executive Masters Of Business Administration and that, to the best to 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.

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## ABSTRACT

The Ghanaian automobile service industry has recently seen a lot of competition with the proliferation of various brands. The provision of quality after-sale service has therefore become an important source of competitive advantage in winning and retaining customers. The study sought to use Toyota Ghana Company Limited as a case study to understand the relationship between service quality and customer loyalty. This research work adopted the SERVQUAL service quality model with its five dimensions (tangibles, reliability, responsiveness, assurance and empathy) to measure customers' perception of service quality and to investigate its effect on their loyalty. A self-completion questionnaire with a total of 45 closed questions and 2 open ended questions was developed to gather field data from 5 Toyota Ghana branches nationwide. All of the items were measured by using a five Point Likert-type response scale. SPSS software was used to carry out reliability test, descriptive analysis (frequency and percentage distributions), correlation coefficient tests and regression model analysis on the data obtained. Responses to the open ended questions were also studied. The results showed that there exists a positive relationship between all the five dimensions of service quality and customer loyalty. It also showed that Toyota Ghana customers have a positive perception of services rendered to them and have a high sense of loyalty to the company. The study provides insight and significant feedback from automobile service customers. As the competitive environment increasingly becomes fierce, the voice and expectations of the customers have become important in the quest to keep them loyal so as to maintain long term organizational revenue streams. This finding is expected to serve as a guide to automobile service managers and also to managers of service firms in general in making informed judgment about the quality of their services having the customer in mind.

## DEDICATION

To the loveliest people in my life; my wife Sylvia Afua Dadson and my daughter, Deanne-Dulce Dzidzor Datsomor for their encouragement and support.

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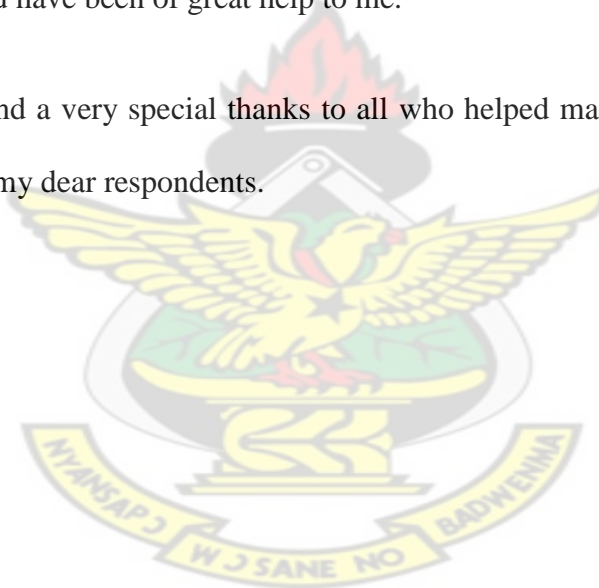


## ACKNOWLEDGEMENTS

I would like to express gratitude to my supervisor, Mr. Bylon A. Bamfo, for his support and advice during the research work. I am grateful for his guidance.

My sincere appreciation also goes to Mr. Jonathan N. O. Welbeck for his priceless inputs in this work. To my wife Sylvia Afua Dadson, and my parents, Mr. M.C. Datsomor and Agnes Datsomor for their support and encouragement. My special thanks goes to Vicentia Elorm Gomado, Francis Klenam Kekesie, Gloria Nkegbe and Rebecca Ehun for their tremendous support during data collection and input and during questionnaire administration. You have been of great help to me.

I also wish to extend a very special thanks to all who helped make this research work a success especially my dear respondents.



## ABBREVIATIONS

TGCL - TOYOTA GHANA COMPANY LIMITED

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# CHAPTER ONE

## INTRODUCTION

### 1.1 BACKGROUND TO THE STUDY

Developing long term relationship with consumers is no more at the back burner of marketing practices in today's competitive world. The premise of retaining a customer over a long term has proven to be more beneficial than always focusing on attracting new ones: It helps companies reduce costs of operations while significantly increasing consumers' lifetime revenues (Reichheld and Sasser, 1990). This has prompted many studies to look into the antecedents as well as consequences of customer loyalty. One study area that has attracted significant interest towards the understanding of customer retention is service quality. Berry (1995) indicates that "the object of improving service quality is to engender customer loyalty". Service quality, as perceived by the consumer can have both direct and indirect (through customer satisfaction) impact on customer loyalty. The interest in service quality is also prompted by the fact that services present characteristics that not only make them different from physical goods, but also problematic. This prompted the call for more studies into the many questions surrounding service quality (Parasuraman, et al, 1985a). In this competitive world, providing high-quality services is necessary for all service providers. (Sureshchander et al., 2002). Authors Cronin and Taylor (1992), and Anon (2008) have pointed to the growing service economies of most advanced countries as well as maturing markets where offering quality services is the sustainable strategic path.

Similar to other countries, Ghana's economy is growing fast and so is the services sector. The services sector has employed a little over 23 % of Ghanaian in 1960 to 31.5% in

2000, compared to the manufacturing industry, 15.1% to 15.5% and, the agriculture sector, 61.8% to 53.1% over the same years (Anon, 2006). The stable political climate coupled with recent crude oil discovery is attracting more foreign investors to set up. Competition among businesses to capture and keep customers has become keen and one such area is the automobile industry consisting of vehicle sales and after-sale services. The industry has recently seen a proliferation of various vehicle brands. Due to the varieties, market share is now thinly spread across the various distributors. It is worth noting that, Automobile companies in the country rely heavily on import of the vehicles, This, according to Gilewicz, et al, is peculiar to most developing countries (Gilewicz, et al, 1976). There is usually very limited control over product quality. Focus has therefore shifted to the provision of quality after-sale services as one of the main strategies to maintain competitive advantage in the Ghanaian automotive industry. There is the growing need to satisfy customers continuously in order to earn their loyalty. This can only be realized if the right instruments are used to measure and understand the customer's needs.

## **1.2 PROBLEM STATEMENT**

According to Oliver (2007), for the automobile industry, made up of dealers and manufacturers, customer satisfaction through quality service remains one of the main factors affecting customer loyalty. It is however interesting to note that marketing literature is full of studies of service quality across a wide scope of services sectors including, the health sector (Padma et al, 2007), public transport (Pe´rez et al, 2007), in the telephony (Santouridis and Trivellas, 2010) and in the banking sector (Nair et al, 2010). The automobile services industry, which provide “car servicing, mechanical repairs, car body repairs and breakdown and recovery services” (Brito et al, 2007 p.464)

however has few studies on service quality and its relationship with customer loyalty. In Ghana, even though few data exist on the number of cars imported into the country (e.g. 8,702 in 2010, Tema Port), no such data exist on the services sector of the industry. These limited publications imply that there are more questions than answers about the service quality and its relationship with customer retention in the car services industry in general. In addition, the concept of service quality still evades many researchers and practitioners. As pointed out by Cronin and Taylor (1992) “service quality is an elusive and abstract construct that is difficult to define and measure”. Its relationship with customer loyalty has also been described as “complex” (Brito et al, 2007), or “largely unexplored” (Cronin and Taylor, 1992). This study therefore aims at exploring the extent to which service quality, as measured through consumer perception influences a car service consumer’s decision to remain or leave a car service provider. This will hopefully lead to increased knowledge and understanding about the concept of Service quality and its relationship with consumers’ behaviours.

### **1.3 RESEARCH OBJECTIVES**

The study generally aims at understanding the relationship between service quality and customer loyalty in the automobile service industry using TGCL as a case study. To achieve this, the research is designed at addressing the following specific objectives:

1. Investigating the extent of customer perception of the various dimensions of service quality in Toyota Ghana Company limited (TGCL).
2. Establish the relationship between the dimensions of service quality and customer loyalty.
3. Identify which of these service quality dimensions are most significant in determining loyalty among TGCL customers.

#### **1.4 RESEARCH QUESTIONS**

The study will seek to answer the following questions;

1. How do customers perceive the dimensions of service quality in Toyota Ghana?
2. What is the relationship between these service quality dimensions and customer loyalty?
3. Which of these dimensions of service quality have the most significant effect on the loyalty of TGCL customers?

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#### **1.5 SIGNIFICANCE OF STUDY**

The study seeks to build on existing researches by examining service quality and its effect on customer loyalty in the automotive industry in Ghana with emphasis on after-sale service. The study will bring to light the relevance of upholding quality as a means of offering satisfaction to vehicle owners during the active period of use of the vehicle. Toyota Ghana Company Limited and other automobile companies will be better equipped to take decisions on the right investments to improve on quality of service and eventually on customer loyalty. This research provides both theory development for academics and practical implication for marketing managements. Marketers may take clues from this and improve their customer retention strategies.

Such a study will be relevant in developing countries like Ghana due to limited availability of empirical knowledge on the subject. Ghana is one of the fastest growing economies in West Africa and a focused study like this will provide extra knowledge and increase understanding of critical variables that help in forming strong customer bonds for the growth of businesses.

The society is also expected to benefit from the output of this research work since this will serve as an information base which adds up to the existing body of knowledge and data on customer behavior in the services sector.

### **1.6 SCOPE OF STUDY**

The study is expected to cover customers of all automobile companies in Ghana. However, this study is limited to the customers of Toyota Ghana Company Limited and its branches nationwide. The study is also limited to automobile services only. This involves the maintenance, repair and general care of vehicles. Further, the geographic scope is limited to Accra and Kumasi, Tema and Tarkwa where TGCL offices are located. Accra, Tema and Kumasi are major cities in Ghana with relatively high standards of living and concentration of large companies and governmental organizations resulting in a high concentration of automobile usage. Tarkwa is a major mining town in the middle of large mining companies owning large automobile fleet. This study is limited to the dimensions of service quality only, other customer relationship tactics and quality measurements are excluded in this study. In addition, this research work and analysis is based only on customer's point of view, the service firms' perspective about this subject are not considered in this work .

### **1.7 LIMITATIONS OF STUDY**

The sample size for the survey is about 10% of Toyota Ghana's customer population under study. It is a rather small representation of the entire population and therefore might not bring out much generalized results characteristic to all Toyota Ghana customers, more so, customers in the Ghanaian after-sale service industry. Due to

constraints of time and scope, the sample size of 600 was maintained. The aim of the study is to provide meaningful data, rather than to provide universal conclusions.

Furthermore, the regression analysis performed in this study made use of the mean scores of the various constructs per observation although the data being dealt with is ordinal in nature. Using the mean scores as a measure of central tendency goes with the assumption that the intervals between the points on the ordinal likert scale are equal although in reality that cannot be ascertained for ordinal data. Using the mean scores however helped in producing the regression model's best line of fit which was used for the analysis.

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### **1.8 ORGANIZATION OF STUDY**

This work is organized into five chapters, chapters one to five. Chapter one captures the background to the study, objectives, research questions, significance of study and research scope, as well as organization of study. Chapter two describes the review of literature relevant to the research theme, providing insight into previous studies relating to the research area. Chapter three describes the methodology including research design, sample and sampling procedure, method of data collection, and method of data analysis. Chapter four presents analysis of data while chapter five describes the summary, conclusions and recommendation.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

In this chapter previous studies informing the current research have been identified and critically reviewed. Literature review is important for every study because:

*“Knowledge does not exist in a vacuum and your work only has value in relation to other people’s. Your work and your findings will be significant only to the extent that they are the same as, or different from, other people’s work and findings”*

Jankowicz (2005), cited in (Anon, 2009, p.48)

The chapter briefly the uniqueness of service provision which calls for relationship marketing as a commitment of both the consumer and the supplier to have repeated transactions. Service quality and its dimensions are discussed as well as customer loyalty.

#### 2.2 NATURE OF SERVICE PROVISION

From different perspectives, services remain different from products and goods. Its main characteristics, intangibles, inseparability, heterogeneity and perishability set the boundary widely open between these two offerings. For instance, intangibles, the inability to see or touch what would be produced as a service prior to a service encounter makes service purchasers more vulnerable and uncertain than those buying goods and physical products. This becomes critical in services high in credence (Zeithaml, 1981). Similar challenges exist with inseparability where the consumer must be present at the point of production for simultaneous consumption. As it is, these characteristics not only define the boundary between goods and services but also are sources of the

problems facing many service marketers (Parasuraman, et al, 1985a). Vulnerable customers now take into account total costs of services and demand higher standards for quality services from services companies (Parasuraman *et al*, 1985). These developments now require that services companies adopt long term relationship approaches to deal with the high perception of risks associated with services consumption (Shostack, 1977; Parasuraman, et al, 1985). This is where relationship marketing comes into play.

### **2.3 RELATIONSHIP MARKETING**

Relationship Marketing is a type of marketing that stresses on building lasting relationships with customers rather than dealing with them on individual transactions. By seeking to maintain a long term relationship with a customer, customers' search costs, risks and uncertainties usually surrounding new purchase decisions will significantly reduce. When these benefits become obvious to the customer, they have no reason to decline becoming 'relationship customers' (Berry, 1995). Thus, relationship marketing brings to service marketing an opportunity to reduce risks, deliver better interactions and build loyal customer base for maximum recurrent profits (Grönroos, 2007; Reichheld and Sasser, 1990). The term relationship marketing was popularized in the 1980s when the focus of marketers started to switch from customer acquisition to customer retention (Grönroos, 2000). The authors Morgan and Hunt (1994) described relationship marketing as, all the marketing activities that are designed to establishing, developing, and maintaining successful relational relationship with customers. Hougaard and Bjerre (2002) also saw relationship marketing as company behavior with the purpose of establishing, maintaining and developing competitive and profitable customer relationship to the benefit of both parties.

As a practice, Relationship Marketing differs from other forms of marketing in that it recognizes the long term value of customer relationships and extends communication beyond intrusive advertising and sales promotional messages. Consequently, some authors, including Aijo (1996) call for a complete overhaul of the traditional marketing based on the 4Ps in favour of relationship marketing. On the charges, the traditional marketing stands accused of being transactional: fast at winning one-time purchase and loosing on customers' life-time value. It also fails to acknowledge that profit can be boosted by 100% simply by reducing defection rate by 5% (Reichheld and Sasser, 1990). Grönroos, (1994) is one of the critics. He explains that in transaction marketing there is not much more than the core product which may help in keeping the customers, at least for some time. However, a firm pursuing a relationship marketing strategy, on the other hand, has created more value for its customers than that which is provided by the core product alone. Such a firm develops over time more and tighter ties with its customer and if they are well handled they provide customers with added value, something that is not provided by the core product itself. This will help to retain customers for the long term; it can help people identify good after-sales service and customer care with the product and increases trust, which people have in the company selling the product. It helps show the customer that the company cares for its existing customers as much as the new ones and that satisfaction of the customers over the long run are of critical importance. The main point is that services companies need to maintain continuous relationship with their customers in order to accrue benefits. The overall goals are to find, attract and win new clients; nurture and retain those the company already has; entice former clients back into the fold; and reduce the costs of marketing and client service. When an implementation is effective, people, processes, and technology work in synergy to increase profitability, and reduce operational costs. Since the final purpose of relationship marketing is to gain the

maximal value of a customer, customer loyalty should be emphasized to achieve this goal. Even though relationship marketing promises to help companies retain their customers, many issues remain unaddressed: for instance what factors drives customer loyalty in a relational service context?

## **2.4 SERVICE QUALITY**

A service, whether as a core product or a customer service presents an opportunity to create value for the customer (Trasorras *et al*, 2009; Grönroos and Ravald, 1996). As such it has to be of quality, especially if the former is established (Parasuraman *et al*, 1985b). Since the 1980s there has been an increase in the enquiry into service quality (Lehtinen and Lehtinen, 1991). This interest is fuelled by companies realising that service quality is a more effective source of competitive advantage (Zeithaml, 2005). This lead to more studies on its conceptual framework, techniques for measurement, managerial implications and its effect on consumer behaviour (Pe´rez et al, 2007; Padma et al, 2007). This thesis seeks to explore the service quality-loyalty relationship in the automobile industry. This is necessary because as discussed earlier, the nature of services as compared to physical products still makes it difficult for a comprehensive study and a consensus among services researchers (Pe´rez et al, 2007).

### **2.4.1 The concept of quality of a service**

There are two main issues shaping studies in the conceptualization of service quality. The first is how consumers evaluate service quality and the second is what influences customers' evaluation of service quality. On the first issue, consensus are that, consumers evaluate service quality based on their perception. This is mainly due to the

high level of intangible nature of a service outcomes (Zeithaml, 2005; Grönroos, 2001; Parasuraman et al,1988). However, this makes the concept less objective and less easy for many researchers to digest (Brady and Cronin, 2001). Parasuraman et al,(1988) define perceived service quality as: “the global judgement, or attitude, relating to the superiority of the service”. The literature establishes that, perceived service quality itself is as a result of a comparison between consumers’ pre-purchase expectations and the perception of actual service received or experienced from the service provider (Parasuraman et al, 1985b, Grönroos, 1884). This is referred to as the expectancy-disconfirmation (Oliver 1980)

Based on the perception-minus-expectations model, Parasuraman *et al*, (1988, 1991) developed SERVQUAL, an instrument for measuring service quality. The instrument has 22 pairs of items measuring customers’ expectations of service quality from a particular service industry in one hand and perception of service performance from a particular service provider within the industry, in another. Perceived service quality is thus identified by calculating the difference between perception (P) and expectations (E) at different levels.

Some scholars argue for a performance-only model (SERVPEF) of perceive service quality (Cronin and Taylor , 1992; 1994; Babakus and Mangold, 1992a). One argument is that perceived performance better captures consumers’ attitude. Babakus and Boller (1992b) also indicate that consumers are unable to distinguish between desires and current performance. As such they tend to always rate their expectations higher than performance. Carman (1990) also shares similar view and further emphasises on the practical difficulties associated with gathering data on expectations.

On the second issue, Zeithaml (2005) mention that the notion of service quality is about its dimensions, i.e. that factors on which customers form their perception of service quality. In the words of Zeithaml (2005, p.117), “ [they] represent how consumers organize information about service quality in their minds”. The writings of Grönroos (1984) Parasuraman et al (1985) and Lehtinen (1983) provide answers to the overriding question of what customers of services see in a service as a need-satisfying solution in the absence of any perceived ready-made product. In other words what are the dimensions of service quality perceived by service customers? Answers to this question show that consumers of services form their perception of quality on multiple factors or dimensions: Grönroos (1984) identified 3 dimensions as: technical quality, functional quality and corporate image. He explains technical quality as the outcome of the service, i.e. what the consumer gets or receives from the service encounter. The functional quality of a service quality is the consumer’s view of how the service is delivered. Since service production and consumption takes place in the presence of the consumer, what happen during the service encounter is also very important to the consumer when evaluating service quality. Contrary to the technical outcome, the functional dimension is subjective and more difficult to describe. Grönroos (1984) also add a third dimension, the corporate image which results from experiencing the company’s services. In the words of Padma et al (2007, p.160), the corporate image dimension serves as “a filter in consumers’ perception of quality”. The idea is that consumers’ perceptions which are attitudes and belief are influenced by their experiences with the service company over time. If a good image is held about a service company, this will influence a consumer’s perception of service quality even during service breakdowns.

Lehtinen and Lehtinen (1991) also identified dimensions similar to that of Grönroos (1984) which explain that service consumers see beyond the outcome of the service

rendered to them. Their dimensions include physical quality. These include the tangible outcome as well as the physical environments that enabled the service encounter and the production of the service outcome (e.g. machinery for repair services). Other dimensions include process quality and corporate image. As in the previous cases, Lehtinen and Lehtinen (1982) found that the interaction between a service personnel and a consumer leaves much to the consumer to talk about when evaluation service quality especially as s/he participates in the service process. The same thing applies to a consumer that identifies with a company. It is very important to emphasise that even though Grönroos and Lehtinen and Lehtinen were the first to conceptualise service quality, their initial contribution were only global definitions of the dimensions (Brady and Cronin, 2001)

In an exploratory study to understand the nature and determinants of consumer services, Parasuraman *et al* (1985b, 1988) initially categorised respondents comments into 10 overlapping determinants or dimensions of service quality. These were explicitly explained by Dr. Crocker *et al* (2003) as the following:

- *Access*: the ease with which the service can be obtained. It refers to such things as hours of operation, method of contact (online, in person) and waiting time.
- *Communication*: that is keeping customers informed. It involves a number of skills. Among these is listening empathetically. Communication also involves the use of a common language, and the explanation of the service, its advantages and disadvantages.
- *Competence*: involves a high level of skills and knowledge in providing the service.
- *Courtesy*: is the friendliness and politeness of those who provide the service.
- *Credibility*: is the trust that customers put in the organisation and the person who is providing the service.

- *Reliability*: is the performance of the right service at the right time, done the right the very first time.
- *Responsiveness*: constitutes willingness and readiness of employees to provide immediate service.
- *Security* : is a freedom from danger, risk, doubt, and physical safety. Another key element is confidentiality of what the organisation learns about each employee.
- *Tangibles*: Is the proof that the service and the organisation is credible and trustworthy. Customers, employees too, want physical examples (tangibles) to perceive this credibility.
- *Understanding*: refers to the extent to which the organisation understands what the customer's expectations are, and her feelings about the services being rendered.

These were later collapsed into 5 distinctive dimensions including: Tangibles, reliability, responsiveness, assurance and empathy.

- *Reliability* dimension entails consumers' view about whether the services provided are consistent, dependable and accurate. It is a service company's ability to perform the promised service dependably and accurately.
- *Responsiveness* is the willingness of the service personnel to attend to consumers' needs and provide punctual services.
- *Assurance*, the service employees displayed knowledge, courtesy and ability to convey trust and confidence.
- *Empathy*, How a service company provides care and individualized attention to its customers, as well as having convenient operating hours.

- *Tangibles*, physical representation of the service Appearance of physical facilities, equipment, employees and communication materials from a service company. (e.g. neat appearance of service personnel).

These five dimensions which define SERVQUAL were originally measured with a 22 pairs of items: Tangibles (4 items); Reliability (5 items); Assurance (4 items); Empathy (5 items). The number of items however is now modified across various industries and situations. As it is, the functional quality which results from the service encounter is labour intensive. Thus scholars have also turned attention to the role of people as a puzzle in the quest for service quality. Bitner et al (1992) mentioned that aspects of employees that affect perception of service quality include (a) appearance, e.g. dress and demeanour, (b) skills needed to perform the job, e.g. courtesy, (c) commitment

These early conceptualisation of the dimensions of service quality still guide developments of recent enquiries in the service quality literature (Brady and Cronin 2001). In fact, the findings of Grönroos (1984) is described as a seminal work (Padma et al, 2007) and the service quality dimensions identified by Parasuraman *et al*, 1985b, 1988) still dominate many studies found in the service quality literature (Brady and Cronin 2001) including the current study.

Parasuraman *et al*, (1991) claim the SERVQUAL instrument is generic and observe that it advanced service quality studies across many industries. However, the same can also be said of the criticisms it has attracted. In a review of SERVQUAL, Buttle (1996) identified a total of 11 criticisms, both theoretical (4) and operational (7) in the application of SERVQUAL. Theoretically, the instrument is found to be functional, failing to include the technical outcome of service quality (Babakus and Mangold, 1992; Kang and James, 2004; Kang, 2006). The universality of the five quality dimensions and items within each dimension have also been questioned in many studies across different industries. Carman

(1990) who replicated the SERVQUAL instrument in four different service sectors to check its generic claims found that additional dimensions (e.g. courtesy and access) are needed to better explain perceived service quality. Many scholars who use the SERVQUAL instrument in the automobile service industry which is of interest to this thesis also found more or less number of service quality dimensions. For example, the authoritative study of Bouman and Wiele (1992) about the service quality in the Dutch car industry based on the SERVQUAL instrument found only 3 dimensions: (a) Customer kindness. The service personnel's friendship, willingness and readiness to provide quick help to customers. This dimension is said to identify with all those found by Parasuraman *et al* except tangibles. (b) Tangible, the second dimension remains the same. (c) Faith, the third dimension should result from the customers' understanding and insight into the service process. This paper aims to build upon a version of SERVQUAL developed by Bouman and Wiele (1992) to probe into how customers evaluate services in the automobile service sector.

#### **2.4.2 Importance of the Service Quality Dimensions**

Many scholars who reported on the relative importance of the service quality dimensions and attributes across different industries underline the superiority of the functional dimension of service quality, popularly referred to as "service encounter" over other dimensions. Service encounters are more about social interactions than economic exchanges between a service supplier and consumer (Czepiel, 1990). Grönroos (1984) for instance mention that even though the technical outcome is important to the satisfaction of service consumer, it is "the way" the consumer gets what s/he receives that is most important. Bitner et al (1990) also demonstrated that customer satisfaction/dissatisfaction during service encounters has much more to do with employee "responses" to failure

events than the failure itself. Parasuraman *et al* (1988) provide a more detail understanding of the importance of each functional dimension of service quality. They found that across a broad section of services, Reliability is the most important service quality dimension followed by Assurance, with empathy being the least. A study by Brady and Cronin (2001) also confirm these findings.

Studies in the automobile service industry also confirm the superiority of the functional quality over service outcomes. Bouman and Wiele, (1992) found that customers define service quality based on their perception of the employees performance, i.e. customer kindness dimension. The other two dimensions, Tangibles and faith, only have indirect influences on customers' perceived service quality. However the authors could not identify the specific service attributes that are particularly important to customers. Yazdi *et al*, (2009) who studied the importance of service quality dimensions in four agencies of the largest car manufacturer in Iran found that respondents' expectation are all time high with intangible dimensions compared with the tangibles. Thus, they advice that management refrain from exaggerating the physical elements of service and focus on training of staff to improve interactive quality.

However, one central question about the importance of service quality dimensions for customers is whether generalisation is possible. This is because according to Lovelock (1983), services differ in terms of (a) their nature i.e. whether intangible or tangible action is applied and (b) the recipient or the consumer of the service action, i.e. human or possession. These classification variables imply that the importance of service quality dimensions will vary across service types and generalisation is not possible. Chowdhary and Prakash's (2007) study in this area supports this view. They found that reliability and tangibles dimensions are respectively the most important dimensions, followed by

empathy and responsiveness in a service context where tangible actions are used on possessions (e.g. cars). The reverse is the case for other industries under study. For instance, while reliability is ranked second for services on possessions, it actually occupies a fifth position for an information processing company. In the same vein, scholars such as Reima and Kuehn (2005); Lin and Liang (2011); Pantouvakis (2010) also provide further supports to the difficulties in generalizing the importance of service quality across different services sectors as did Parasuraman *et al* (1988). In their respective studies, they argue that the tangibles dimension of service quality can become more important to service consumers if it is operationalised to take into account new realities of service landscape. Lin and Liang (2011) for instance found that the physical environment defined in terms ambient and design of the servicescape shows more influence on consumer emotions and satisfaction than the emotions displayed by the service personnel.

On the basis of previous researches and particularly to those in the automobile service industry, this thesis will attempt to find out which of these service dimensions are most important to the customers under study.

## **2.5 CUSTOMER LOYALTY**

Oliver (1997, p.392) defined customer loyalty as a “deeply held commitment to rebuy or re-patronize a preferred product or service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”. Loyalty has also been described as “an unspecified number of repeat purchases from the same supplier over a specified period” (Egan, 2004). The customer is the main means through which a company can see profitable growth and customer loyalty can lead to profitability (Hayes,

2008). For a customer, loyalty is a positive attitude and behavior related to the level of re-purchasing commitment to a brand in the future (Chu, 2009). Loyal customers are less likely to switch to a competitor solely because of price, and they even make more purchases than non-loyal customers (Bowen and Shoemaker, 2003). Loyal customers are also considered to be the most important assets of a company and it is thus essential for vendors to keep loyal customers who will contribute long-term profit to the business organizations (Tseng, 2007). Attempt to make existing customers increase their purchases is one way to strengthen the financial growth of a company (Hayes, 2008).

The aim of relationship marketing therefore is to build a loyal customer base. This involves showing more interest in taking care of acquired customers (Ravald and Grönroos, 1996). Studies on customer loyalty surged because many practitioners as well as researchers realized its long term benefits (Zeithaml, 2005). Some studies on the benefits of customer loyalty found that it has the potential to reduce customer defection, reduce costs of operations especially in advertising, increase opportunities for cross selling and low price sensitivity, increase word-of-mouth endorsements and, increase the company's overall profit. Reichheld explains that when customers have come to understand the company as a result of the length of time spent together they buy into its value proposition which then improves its revenues and market share. Zeithaml (2005) share similar views and further explains the economic benefits of customer retention saying that customers tend to favor suppliers they have ongoing relationship with by giving them more of their businesses. Despite the glaring benefits associated with customer loyalty or retention, many companies still set employees' rewards in relation to new customers (Zeithaml, 2005) while many others have not been successful in its implementation (Berman, 2006).

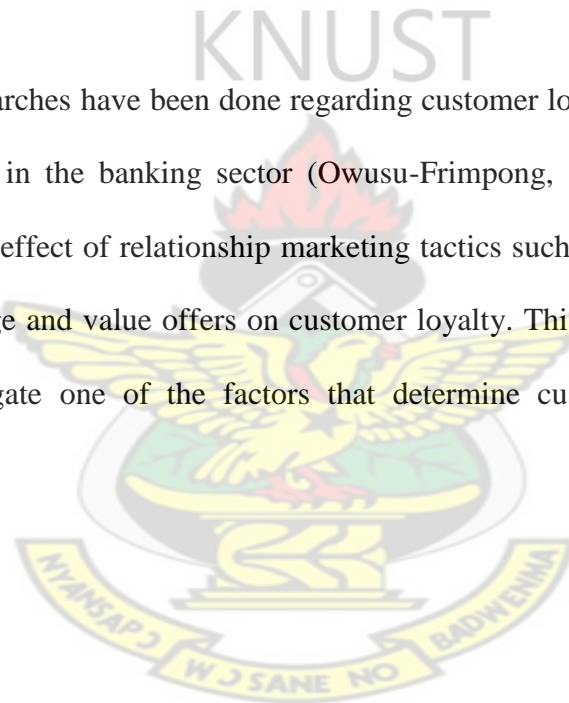
Some scholars developed models to enable development of relationships between two parties (Beatty et al, 1996). Zeithaml (2005) discussed a model where new customers referred to as “strangers” are attracted and gradually converted into acquaintances, friends and partners over time. As noted by Anon (2008), relationship models identify marketing efforts and aims that must guide service providers in building and keeping interactions alive. As such, companies must always deploy resources to first of all attract new customers. Next, they must seek to satisfy acquired customers. Subsequently, companies must strive to build trust and overtime, seek opportunities to enhance their offerings to customers.

Customer loyalty remains a key issue among managers because of the lack of consensus on how best to measure it. Reichheld (2003b) identifies that a customer’s intention to recommend his or her service provider to others is the “ultimate act of loyalty” (p.50). Keiningham et al, (2007) however argue that no single customer attitude is enough to explain subsequent future behavior. As such loyalty can take the form of attitude, where satisfied customers express buying intentions and preferences for a company’s products and services (e.g. repurchase intention, recommend intention). Loyalty can also be gauged by looking at actual behaviors, for instance, an increase in frequency of purchase and share of wallet.

Customer retention or loyalty and the best attitude that predict it still retain a high interest among researchers and managers. As can be deduced from earlier review, customer retention and loyalty behaviors are multidimensional which implies that several factors influence a customer’s decision to remain with a particular service provider. Previous studies found trust (Morgan and Hunt, 1994; Berry, 1995), satisfaction (Oliver, 1993; Cronin and Taylor, 1994, Jones and Suh, 2000), switching costs (White and Yanamandram, 2007; Burnham et al, 2003), service quality (Ranaweera and Neely, 2003,

Pe´rez et al, 2007; Parasuraman et al, 1996), image (Aydin and Go`khan O`zer, 2005; Hess Jr, 2008) among other factors. Numerous researchers have tried to find relevant antecedents and their role in creating customer loyalty. Service quality, customer satisfaction, corporate image, word-of-mouth communication, perceived value have been proposed as antecedents of loyalty (e.g., Wieringa & Verhoef, 2007; Patterson & Smith, 2003; Burnham et al., 2003; Jones et al., 2000) and these variables are also taken as driving force of competitive advantage and corporate success (Landrum & Prybutok, 2004; Yang & Peterson, 2004; Wang, Lo, & Yang, 2004; Khatibi, Ismail, & Thyagarajan, 2002; )

In Ghana, few researches have been done regarding customer loyalty and its antecedents and this is mainly in the banking sector (Owusu-Frimpong, 1999). Joyce Osei Kyei (2011), studied the effect of relationship marketing tactics such as service quality, price pricing, brand image and value offers on customer loyalty. This research work seeks to thoroughly investigate one of the factors that determine customer loyalty, namely, service quality.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter looks at the research design and methodology used in the study. It is an important component that essentially maps out the methods and overview approach that was utilized in conducting the research. The chapter begins by discussing the research design and the case selection. It further provides descriptions of how data was gathered, processed, and analysed to draw conclusions. Details are given about the research population, the questionnaire, data collection and a full explanation on the conduct of the survey. The chapter ends with a discussion about how the data was analyzed.

#### **3.2 RESEARCH DESIGN**

Aaker and Day (1990) define a research design as “a detail blueprint used to guide the implementation of a research study towards the realization of its objectives”. Zikmund’s (2003) definition of research design also emphasizes on the methods and techniques for gathering and analyzing data. Thus, a research design is mainly about deciding best research approach or methodology to obtain the data.

It began with a review of existing literature on the concept of service quality and customer loyalty. This first literature review helped in the identification of a research topic, development of research objectives and main question and understanding previous research methodologies during the development of the research proposal. A second literature review as well as secondary data collection was conducted following approval of the research proposal. At this level, the peripheral knowledge used in writing the proposal was expanded, leading to primary data collection through questionnaires.

### 3.3 CASE SELECTION AND SAMPLING

The case selection of this research was focused generally on the Ghanaian automobile service industry with Toyota Ghana Company Limited (TGCL) and its customers as the specific case. Toyota Ghana Company Limited, (TGCL) entered the Ghanaian automobile industry some 15 years ago and quickly rose to the leadership position, thanks to sound management practices and a commitment to always satisfy customers. In 2010, its commitment to excellent services was rewarded by The Toyota Corporation of Japan. In the same year, TGCL alone controlled a little over 19% of a total of number of new cars imported into the country. Its closest competitor, Rana Motors (dealers of KIA cars) stood at 10.31%. With the rate at which competitors were growing in new vehicle sales and the introduction of competitive vehicle models in the market, the company recently embarked on a new strategic path, to expand its after-sales services as a way of differentiating itself from its competitors. The company sees major challenge ahead in terms of meeting customers' expectations of service quality, but believes concentration on the after-sales services sector is the best path to consolidating the company's customer base and its future revenues streams. It was therefore appropriate to select Toyota Ghana Company Limited to test the extent of perception of service quality in automobile service industry and to establish the relationship between of service quality and customer loyalty. Another reasons for this case selection was that the author is working in Toyota Ghana company limited and it would be easy for the author to get related information and support.

The research was studied from customers' point of view, and so the population was made up of customers who utilize vehicle maintenance and repair services in the Ghanaian automobile service industry. The decision about a sample size of customers

was taken considering time and cost, the need of precision, and a variety of further considerations (Bryman and Bell, 2003). Due to the limit of time and costs, the population was narrowed to customers of TGCL's after-sale service departments across its various branches nationwide. TGCL currently has five branches namely the Accra branch, Kumasi branch, Tema branch, Tarkwa branch and the Body and Paint (BP) branch, also in Accra. Customers in these five branches were chosen as survey sample. The sample selected was not bias towards one particular group of users, the units included people with diverse demographics and employment status who visit TGCL service shops. These were mostly made up of drivers, individual vehicle owners and fleet transport managers. The total sample size was 600 customers.

### **3.4 QUESTIONNAIRE DESIGN AND DATA COLLECTION**

A self-completion Questionnaire with mostly closed questions and two open ended questions was developed for primary data collection. The questions were easy to follow and particularly easy to answer. According to Bryman and Bell (2003), closed questions have some advantages: it is easy to process answers; it enhances the comparability of answers, and makes them easier to show the relationship between variables.

The questionnaire was composed of three parts and total of 47 statements (see appendix). The first part was about individual characteristics with four questions on gender, educational level, customer type and their TGCL service branch. The second part contained questions on all six constructs. Several items on each construct were developed and adopted from relevant literatures (see appendix A). All of the items were measured by using a five-point Likert-type response scale, with 5 being strongly

agree and one being strongly disagree. The third part was made up of two open ended questions. Here, respondents were asked to write their opinions on their expectations of a good service and what will keep them loyal to the service provider.

The researcher recruited research assistants in all the TGCL branches to help in the administering of the questionnaires. The researcher with support from one assistant personally administered the questionnaires at the Accra branch. He also visited the Tema, Kumasi and BP branches during the period to check the progress of administering of questionnaires, gather first hand information on the ground and help clarify any issue arising in the course of the exercise. Customers were generally enthusiastic to answer the questions. Initially, customers were made to fill the questionnaires themselves. We however realized at the Accra branch, that a good number of them left some pages unfilled and some did not fill at all while a few requested to send the questionnaires away to be submitted later. Our quick investigation revealed that some customers, especially the drivers, were finding it difficult to read or understand the questions. Some customers also felt there were too many questions to answer. To solve these problems, we changed the administering style by sitting with customers one on one and helping them fill the questionnaires. Although this was highly tedious, it was found to be very effective in ensuring a high rate of error free responses. The story was similar in the other branches. Most customers at the Kumasi branch took their questionnaires away and it was difficult retrieving them. That resulted in a much lower recovery rate. The assistant at the Tarkwa branch could not have enough time to sit with customers one on one. This resulted in a low response rate from Tarkwa branch as well. In all, 600 questionnaires were sent out and 511 valid responses were received. Table 1 in the next chapter outlines the questionnaire distribution and response statistics.

### **3.5 RELIABILITY AND PRETESTING**

#### **3.5.1 Reliability Testing**

Reliability testing was conducted on multiple-items under each construct to ensure each of the items correlated and could be aggregated to form an overall score for that construct (Bryman & Bell, 2003). Cronbach's alpha method was used for the test. The result of 0.7 and above implied an acceptable level of internal reliability. During the pretest, the results of the Cronbach's alpha analysis originally confirmed high correlations and reliability among items under each construct. Questionnaires were then printed out for distribution according to the sample selected. However, a second reliability test during the analysis of overall data gathered recorded Cronbach's alpha results of less than 0.7 for two of the constructs, Tangibles perception and customer loyalty. One question each was excluded in these two constructs to achieve the desired levels of internal reliability of question items. Analysis of data was therefore based on the final set of question items.

#### **3.5.2 Questionnaire Pretesting**

The questionnaire was pretested to find out its effectiveness. This involved selecting, approaching and interviewing a small segment in the same manner which was followed in the full scale operation. Through this the researcher was able to know whether the replies or questionnaire responses provided the type of information needed or respondents were misinterpreting any of the questions. Results obtained in the pretest helped in the subtraction of some items and addition of new and appropriate ones. Generally the exercise helped in fine tuning the questionnaire. In all 20 questionnaires were tested on a small sample of 15 respondents.

### **3.6 STATISTICAL ANALYSIS**

The field data was processed by editing; coding, classification and tabulation to present a cleared view for analysis. The coding was necessary for efficient analysis of data. For this research work, coding decisions were taken at the designing stage of the questionnaire. All of the items under each of the 6 constructs were measured by using a five-point Likert-type response scales, assigning numerals to question responses with 5 coded for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. Responses for demographical questions were also coded. Question 1 requested for respondents' gender information, numerals were assigned, 1 for male and 2 for female. Question 2 requested for information on educational level. Numerals were assigned, 1 for Basic, 2 for Secondary and 3 for tertiary education. Question 3 wanted to know the type of customer responding. Numerals were assigned, 1 for Individual Vehicle owner, 2 for Fleet Manager, 3 for driver and 4 for other. A space was created for customers to write details if they select other. Question 4 asked for the TGCL branch the respondent visits. Responses were categorized and each assigned numerals as follows, 1 for Accra, 2 for Tema, 3 for Kumasi, 4 for Tarkwa and 5 for BP.

The response categories in Likert scales have a rank order and therefore could be referred as ordinal because ordinal scale of measurement is one that conveys order (Jamieson, 2004). There are many tools and techniques appropriate for analyzing ordinal data. In this study, the research chose the software SPSS for Windows to do analysis. SPSS for Windows is one of the most widely used computer software for analysis of quantitative data for social scientists. SPSS (Statistical Package for the Social Sciences) has been in existence since the mid-1960 and over the years has

undergone many revisions, particularly since the arrival of personal computers (Bryman & Bell, 2003).

The SPSS software was used to carry out reliability test (Cronbach's alpha's test for each construct); descriptive analysis (frequency and percentage distributions); and non-parametric test such as Spearman rank correlation coefficient. The Spearman rank correlation coefficient was used to test the existence of relationships between variables, the strength of association between paired variables and also to test the consistency of the relationship (Gravetter and Wallnau, 2005). A statistical regression analysis was also carried out to further test the relationship between the variables. First to find out the extent to which the independent variables contribute to changes in the dependent variable customer loyalty and also find out which independent variables were or were not very significant in explaining variations in the dependent variable. Some crosstab analysis was also carried out to compare results among the branches, gender and educational levels. Finally, respondents' comments on the two open ended questions were briefly analyzed to further understand their opinions on the subject.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND DISCUSSION OF RESULTS**

#### **4.1 INTRODUCTION**

Data analysis involved various ways through which information gathered from the field and other sources were put together in a meaningful way for easy comprehension. This chapter has four main sections: The first section talks about analysis of the questionnaire distribution. The second section talks about the reliability testing of question items in the questionnaires. The third section is on the demographic characteristics of respondents. It is important to emphasize that though these are not the main focus of the study, they contribute significantly to a better understanding of the issues surrounding the topic under study. The third section then discusses into detail statistical analysis of responses gathered on the various constructs and tries to match patterns found in the data with those put forwards in existing theories.

#### **4.2 QUESTIONNAIRE DISTRIBUTION AND RESPONSE ANALYSIS**

A total of 600 questionnaires were distributed to customers of the various branches of TGCL. Number of questionnaires earmarked for each branch was based on TGCL customer concentration in that region.

From table 4.1 below, total number of questionnaire responses received was 527 representing a response rate of 88% of the number sent out. Among the branches, Accra and BP branches had the highest response rate of 93%. These two branches are based in Accra, where the researcher works. The researcher therefore was able to follow up more strongly to ensure a relatively higher response rate. Tarkwa branch had the least

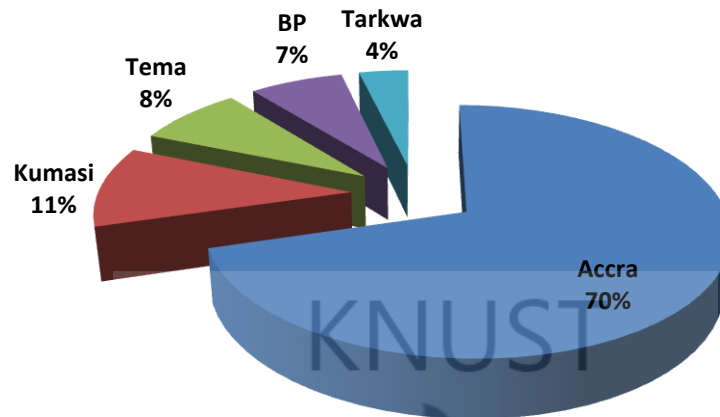
**Table 4.1: Questionnaire Distribution and Response Statistics**

TGCL Branch	Questionnaires Sent out	Number received	Response Rate	Number Incomplete/errors	Error Rate	Number Analyzed	Overall Recovery rate
Accra	400	372	93%	12	3%	360	90%
Kumasi	80	57	71%	2	4%	55	69%
Tema	50	42	84%	1	2%	41	82%
BP	40	37	93%	1	3%	36	90%
Tarkwa	30	19	63%	0	0%	19	63%
<b>Total</b>	<b>600</b>	<b>527</b>	<b>88%</b>	<b>16</b>	<b>3%</b>	<b>511</b>	<b>85%</b>

Source: Field data, 2012

responses (63%). Out of the total of 527 responses received, 16 were detected to be incomplete or had errors representing an overall error rate of 3%. In administering the questionnaires the researcher was well aware of the possibility of missing values, the situation where a respondent skips a question because he or she does not understand a phrase or the entire question. There was also the possibility of some respondents failing to complete entire questionnaires due to the tall list of questions involved or due to time constraints. The researcher was also aware of the fact that a large percentage of customers who visit the facility are drivers who mostly have as high as secondary education and might make mistakes when filling the questionnaires or might refuse to respond at all. To avoid such problems, the researcher recruited a team of volunteers to be with and guide respondents in answering the questions. This perhaps contributed greatly to achieving the low overall error rate. Thus out of 600 questionnaires originally distributed 511 correct and defect free responses were recovered (85% recovery rate) and formed the basis for this analysis. Frequency distribution of responses per TGCL branch is shown in Figure 4.1.

**Figure 4.1: Frequency Distribution of Responses across TGCL Branches**



Source: Field data, 2012

#### **4.3 RELIABILITY TESTING**

The survey involved multiple-item measure for each of the six constructs. Reliability tests were carried out to ascertain whether question items under each construct were strongly related and were good indicators for the construct. Cronbach's alpha method was used for the test. A result of 0.7 and above according to Nunnally (1978) implies an acceptable level of internal reliability.

Referencing table 4.2 below, it can be said that the Cronbach's alphas for all six constructs (Tangibles perception, Reliability perception, Responsiveness perception, Assurance perception, Empathy perception, and Customer loyalty) were above the threshold (0.7), indicating acceptable levels of internal reliabilities. During the initial reliability test, two of the constructs recorded Alpha values below 0.7. These were the Tangibles Perception (0.649) and Customer Loyalty (0.680).

**Table 4.1: Reliability Statistics Output**

<b>Constructs</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>	<b>Acceptable Level of Internal Reliability</b>
Tangibles Perception	0.711	11	Yes
Reliability Perception	0.740	7	Yes
Responsiveness Perception	0.741	6	Yes
Assurance Perception	0.719	7	Yes
Empathy Perception	0.731	7	Yes
Customer Loyalty	0.814	5	Yes

Source: Field data, 2012

An investigative test was conducted to bring out question items which did not relate strongly to their respective constructs. One question item each was taken out of both construct in order to achieve their final Cronbach's Alpha values as shown in Table 4.2 above. Thus final set of question items defined under each construct were well related and aggregated to give a common view about their associated construct. These were therefore used throughout the statistical analysis.

#### **4.4 DEMOGRAPHIC CHARACTERISTICS**

The total sample of 511 responses analyzed revealed that the sample included both genders and captured all customer types involved with TGCL.

#### 4.4.1 Gender Analysis

Gender Analysis as depicted by Table 4.3 and Figure 4.2 (below) explains that majority of the 511 respondents were male, 463 giving 91% of the total, while female respondents were 43 giving 9%. This also explains that activities surrounding the maintenance of a car are still the preserve of men. In a related research, Brito et al (2007) also identified that their sampling size strongly emphasized a male dominant area when researching service quality attributes in the car maintenance industry in Brazil.

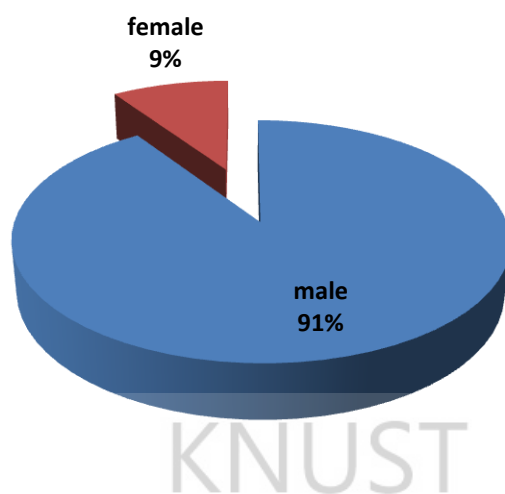
**Table 4.3: Frequency Distribution Table - Respondent by Gender**

Gender	Frequency	Percentage
MALE	463	91%
FEMALE	48	9%
<b>Total</b>	<b>511</b>	<b>100%</b>

Source: Field data, 2012

As it has been observed that Gender tends to differentiate between the importance men and women place on the various service quality dimensions. In a post-purchase evaluation of service quality, Sun and Qu (2011) found that Women tend to talk about the relational dimension of service quality, i.e. empathy, responsiveness, how they have been welcomed, greeted or treated, more than Men who focus on the core service quality, reliability and assurance they have received from the service supplier.

**Figure 4.2: Frequency Distribution of Responses by Gender**



Source: Field data, 2012

#### **4.4.2 Educational Level Analysis**

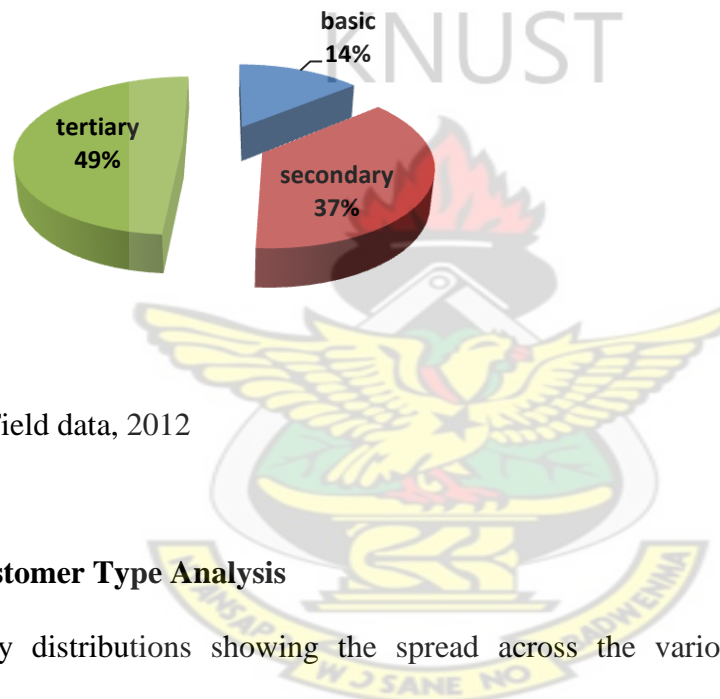
Table 4.4 and Figure 4.3 (below) show that in general, the greatest share of respondents (49%) has had some tertiary level education. Again, 37% of respondents have had secondary level education. This implies that respondents possess the necessary knowledge and ability to make the right decisions and also possess the requisite knowledge to understand and contribute to this thesis. It is worth mentioning that education has been found to influence both perceived service quality dimensions and retention behaviors. For instance, Kimilog˘lu et al (2010) who studied the behavioral segments in the mobile phone market found that the customer segments with the highest education background tend to be pragmatic and value conscious.

**Table 4.4: Frequency Distribution of Respondents' Educational Level**

Customer Type	Frequency	Percentage
Basic	72	14%
Secondary	189	37%
Tertiary	250	49%
<b>Total</b>	<b>511</b>	<b>100%</b>

Source: Field data, 2012

**Figure 4.3: Frequency Distribution of Respondents' Educational Level**



Source: Field data, 2012

#### 4.4.3 Customer Type Analysis

Frequency distributions showing the spread across the various customer types are illustrated by table 4.5 and figure 4.4. These are generally the type of customers who access vehicle service facilities. Responses from a mix of these different types of customers in understanding service quality is important because they all tend to have a different perception of the quality of service offered by a car service firm. Secondly, in a car service firm, different types of customers tend to be more exposed to one quality dimension than the other. Drivers mostly bring vehicles in for service and therefore tend to relate easily and appreciate the tangibles and empathy aspects of the service better. Vehicle owners on the other hand, visit service firms in-person less frequently and are

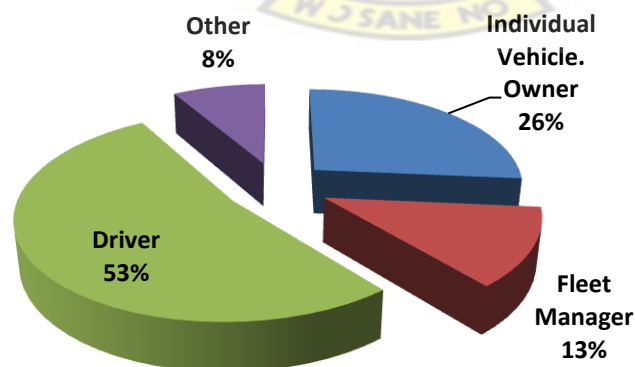
usually more concerned about reliability and assurance dimensions of the service since they are the end users. Fleet managers amongst other things are usually more concerned with responsiveness of services rendered. A good mix of customer types as shown in the customer type table is a good sign that bias in the answers to the questionnaires will be reduced.

**Table 4.5: Frequency Distribution of Responses by Customer Type**

Customer Type	Frequency	Percentage
Individual Vehicle Owner	135	26%
Fleet Manager	64	13%
Driver	269	53%
Other	43	8%
<b>Total</b>	<b>511</b>	<b>100%</b>

Source: Field data, 2012

**Figure 4.4: Frequency Distribution of Responses by Customer Type**



Source: Field data, 2012

From Figure 4.4, the largest number of respondents were drivers (53%), followed by Individual vehicle owners (26%), Fleet Managers (13%) and others (8%). This shows that drivers (e.g. company drivers, drivers of vehicle owners, fleet drivers) mostly visit service firms and are therefore mostly in direct contact with the service provider and its staff. Their perception of quality of service rendered is therefore very important since what they report to their superiors can affect the image of the service firm. Individual owners and fleet managers also formed a substantial portion of respondents. Their perceived image of the firms' service quality is very crucial since they experience the entire service themselves and at the same time happen to be the major decision takers as far as repeat sale and loyalty is concerned.

## **4.5 RESULTS AND DISCUSSIONS FOR CONSTRUCTS.**

### **4.5.1 Descriptive Statistics**

Before proceeding to discuss the analysis of responses obtained for the various constructs, it is worth noting that the type of data being dealt with in this research is ordinal in nature. Ordinal refers to quantities that have a natural ordering. The Likert scale, which is used to measure the choice on a rating scale, say from 1 to 5, does produce ordinal data. In measuring the central tendencies for ordinal data, the median or mode is usually employed. The median serves as a valuable alternative to the mean especially for ordinal data. Median is appropriate for ordinal scale because it's defined by direction and ordered sequence as in ordinal scale. Statistical texts are clear that for ordinal data one should employ the median or mode as the measure of central tendency (Jamieson, 2004). This is because the arithmetical manipulations required calculating the mean (and standard deviation) are inappropriate for ordinal data where the numbers

generally represent verbal statements (Kyei, 2011). Kuzon Jr et al. (1996) argued that the average of fair and good is not fair-and-a half; this is true even when one assigns integers to represent fair and good. The median as a measure of central tendency was mostly used in this research analysis to provide an organized and summarized view for the field data. It was used to determine the single value that identifies the center of the distribution and best represents the entire set of data for each construct.

As proposed by Bryman and Bell (2003), a single score for each construct per observation was obtained by computing the median for each construct per observation. The median score per observation per construct was developed to give a summarized view showing responses per respondent (See appendix B). The complete median score for all observations was fed into SPSS software for further computation and analysis including frequency distribution and Spearman correlation test.

**Table 4.6: Descriptive Statistics for the Service Quality Dimensions and Customer Loyalty**

	<b>Tangibles Perception</b>	<b>Reliability Perception</b>	<b>Responsiveness Perception</b>	<b>Assurance Perception</b>	<b>Empathy Perception</b>	<b>Customer Loyalty</b>
<b>Number of Respondents</b>	511	511	511	511	511	511
<b>Mean</b>	3.957	3.986	3.770	3.943	3.781	4.053
<b>Mode</b>	4.00	4.00	4.00	4.00	4.00	4.00
<b>Median</b>	4.0	4.0	4.0	4.0	4.0	4.0
<b>Std. Deviation</b>	0.583	0.615	0.726	0.606	0.746	0.674

Source: Field data, 2012

Table 4.6 above presents the overall scores of the mean, Mode, Median and standard deviation for each construct. On a five-point Likert scale, the median mark for Tangibles perception for all 511 respondents was 4 (denoting 'agree' in the Likert scale). This indicates that customers' perception about the tangible features of TGCL's service is good and quite high. The median mark for reliability for all 511 respondents was 4 (denoting 'agree' in the Likert scale), indicating that customers gave affirmative response and are happy about how reliable TGCL's after-sale services are. The median mark for Responsiveness perception for all 511 respondents was 4 (denoting 'agree' in the Likert scale), suggesting that people agree to the kind of responsiveness shown by TGCL in its service to customers. The median mark for Assurance for all 511 respondents was 4 (denoting 'agree' in the Likert scale). This also implies that TGCL after-sale service instills a good level of assurance in its customers. The median mark for Empathy perception for all 511 respondents was 4 (denoting 'agree' in the Likert scale), meaning customers like the kind of empathy shown to them in TGCL's day to day service delivery. The median mark for customer loyalty for all 511 respondents was 4 (denoting 'agree' in the Likert scale). This suggest that customers will remain loyal to TGCL after-sale service and are willing encourage their friends and relatives to use the services offered by TGCL. Comparing the median scores of the five constructs discussed above, and assuming the responses were provided by same set of respondents, we can conclude that the various dimensions of service quality perceived by customers are linked to customer loyalty.

#### 4.5.2 Spearman's Correlation Test

The Spearman's correlation with two tailed tests of statistical significance at 0.01 levels was carried out to find out the strength of association and the consistency of the relationships between the constructs (Gravetter and Wallnau, 2005).

**Table 4.7: Spearman's Correlation Matrix of Service quality dimensions and Loyalty**

		<b>Tangibles Perception</b>	<b>Reliability Perception</b>	<b>Responsiveness Perception</b>	<b>Assurance Perception</b>	<b>Empathy Perception</b>
<b>Loyalty</b>	Correlation Coefficient Loyalty (r)	0.373	0.351	0.390	0.470	0.299
	Significance (2-tailed) Loyalty (p)	0.000	0.000	0.000	0.000	0.000
	No. of Respondent	511	511	511	511	511

Source: Field data, 2012

From Table 4.7 above, all five dimensions of service quality were found to be significantly (statistically) and positively correlated with customer loyalty. Tangibles perception is significantly and positively correlated with customer loyalty ( $r = 0.373$ ,  $p < 0.01$ ). Reliability perception is significantly and positively correlated with customer loyalty ( $r = 0.351$ ,  $p < 0.01$ ). Responsiveness perception is significantly and positively correlated with customer loyalty ( $r = 0.390$ ,  $p < 0.01$ ). Assurance perception is significantly and positively correlated with customer loyalty ( $r = 0.470$ ,  $p < 0.01$ ). Empathy perception is significantly and positively correlated with customer loyalty ( $r = 0.299$ ,  $p < 0.01$ ).

### 4.5.3 Regression Analysis

Results were analyzed using the linear regression model. Linear regression attempts to model the relationship between a dependent variable, say  $Y$ , and one or more explanatory and independent variables, say  $X$  and  $Z$ , which are believed to explain the dependent variable. This is done by fitting a linear equation to the data gathered. The linear equation between the dependent variable  $Y$  and the independent variables  $X$  and  $Z$  will usually take the form,

$$Y = a + bX + cZ$$

Where  $a$  is a constant or intercept. This is the value of  $Y$  when  $X$  and  $Z$  are zero.  $b$  and  $c$  are coefficients of  $X$  and  $Z$  respectively. They determine the degree of effect  $X$  and  $Z$  have on the dependent variable  $Y$ .

Most commonly linear regression models rely on the mean values of the various variables in determining existing relationship. Less commonly, linear regression refers to models in which median values of variables are used. Among its numerous applications, linear regression analysis helps to quantify the strength of the relation between the dependent variable and the individual explanatory variables. It also helps to determine which independent variables may have no relationship or very insignificant relationship with the dependent variable. It is however important to note that the use of regression analysis requires assumptions. One of the many assumptions is that the  $y$ -variable is normally distributed, and this places some limitation on using regression analysis on all types of data. The normal distribution assumption is more limiting in that only ratio and interval measurement scales can be normally distributed. Technically, it is not appropriate to use

nominal and ordinal measures as the y-variable or dependent variable in regression analysis. However behavioral scientist often use ordinal scales as dependent variables in regression analysis. This typically occurs when the theoretical concept being measured by the ordinal scale, for example, customer loyalty being measured with a likert scale, is assumed to be continuous and is assumed to have an equal interval ordinal scale. Practically speaking however, there are no limiting assumptions for the independent variables. As such they can be measured on scale, be it nominal, ordinal, interval or ratio. Linear regression is used widely in biological, behavioral and social sciences to describe possible relationships between variables. It ranks as one of the most important tools used in these disciplines.

In this analysis, the six constructs being investigated will now be known as variables. The dependent variable for this analysis is Customer Loyalty and the explanatory or independent variables are Tangibles perception, Reliability perception, Responsiveness perception, Assurance perception, and Empathy perception.

Let Customer Loyalty variable be represented by  $C_L$

Let Tangibles perception variable be represented by  $T_A$

Let Reliability perception variable be represented by  $R_L$

Let Responsiveness perception variable be represented by  $R_S$

Let Assurance perception variable be represented by  $A_S$

Let Empathy perception variable be represented by  $E_M$

A linear regression model which defines the relationship between these variables will take the form;

$$C_L = a + b T_A + c R_L + d R_S + e A_S + f E_M$$

Where  $a$  is a constant and  $b, c, d, e, f$  are coefficients of their respective variables.

The mean values per construct of each observation will be assumed to represent the variables to be investigated. These mean values per observation per construct were obtained using the SPSS software and were used to conduct the regression analysis. The researcher chose to use mean values instead of the median scores in conducting the regression analysis. Mean values give a more accurate representation of the average value of each construct per observation compared to median values. To obtain an accurate line of best fit out of a huge amount of data gathered being modeled, the level of accuracy of values are very important. Mean values would help create a more accurate model than median values. As mentioned earlier also, the dependent variable, customer loyalty will be assumed to be continuous and to have an equal interval ordinal scale. The regression analysis output results from SPSS are outlined in tables 4.8, 4.9 and 4.10.

**Table 4.8: Linear Regression Coefficients Table for Service Quality Dimensions and Customer Loyalty**

	Unstandardized Coefficients		Standardized Coefficients	t	P Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	0.66	0.186		3.53	0.000	0.292	1.024
TANGIBLES	0.14	0.049	0.115	2.76	0.006	0.039	0.233
RELIABILITY	0.28	0.051	0.247	5.51	0.000	0.181	0.381
RESPONSIVENESS	0.08	0.047	0.079	1.63	0.104	-0.016	0.170
ASSURANCE	0.34	0.053	0.304	6.34	0.000	0.234	0.444
EMPATHY	0.05	0.044	0.045	1.03	0.305	-0.041	0.132

a. Predictors: (Constant), EMPATH, TANGIBLE, RELIABLE, ASSURE, RESPONSIVE  
b. Dependent Variable: LOYAL

Source: Field data, 2012

**Table 4.9: Linear Regression Model Summary for Service Quality Dimensions and Customer Loyalty**

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics
				R Square Change
0.71	0.64	0.61	0.47	0.64

Source: Field data, 2012

**Table 4.10: Linear Regression ANOVA table for Service Quality Dimensions and Customer Loyalty**

	Sum of Squares	df	Mean Square	F	Sig.
<b>Regression</b>	75.077	5	15.016	68.823	0.000
<b>Residual</b>	110.178	505	0.218		
<b>Total</b>	185.255	510			

Source: Field data, 2012

From the regression coefficient table (table 4.8), the estimated model is:

$$C_L = 0.66 + 0.14 T_A + 0.28 R_L + 0.08 R_S + 0.34 A_S + 0.05 E_M$$

Where 0.66 is our intercept, 0.14 is the coefficient of ( $T_A$ ), 0.28 is the coefficient of ( $R_L$ ), 0.08 is the coefficient of ( $R_S$ ), 0.34 is the coefficient of ( $A_S$ ), and 0.05 is the coefficient of ( $E_M$ ),

- From the regression model, a  $T_A$  coefficient of 0.14 means for every unit positive change in customer perception of tangibles, customer loyalty  $C_L$  changes positively by 0.14 times, and vice versa, all other factors being equal.

- Again, from the model, the  $R_L$  coefficient of 0.28 means that for every unit increase (decrease) in customer perception of reliability, there occurs 0.28 increase (decrease) in customer loyalty, all things being equal.
- Thirdly, an  $R_S$  coefficient of 0.08 means that for every unit increase (decrease) in customer perception of how responsive the service received is, it results in 0.08 increase (decrease) in their loyalty.
- Fourthly, an  $A_S$  coefficient of 0.34 means that for every unit increase (decrease) in customer perception of assurance in the service received, it results in 0.34 increase (decrease) in their loyalty.
- Lastly, an  $E_M$  coefficient of 0.05 means that for every unit increase (decrease) in customer perception of Empathy, it results in 0.05 increases (decrease) in their loyalty.
- From Table 4.9, The R-squared value is 0.64. This indicates that differences in the service quality variables  $T_A$ ,  $R_L$ ,  $R_S$ ,  $A_S$  and  $E_M$ , together explain about 64 percent of the variations in customer loyalty,  $C_L$ .
- From the ANOVA table (Table 4.10) the Significant F value is approximately 0.000. Since this is far less than our chosen level of significance of 0.01, we can conclude that the model as a whole is statistically significant in explaining the values of the dependent variable, Customer Loyalty,  $C_L$ .
- From table 4.10, t-values 1.63 and 1.03 are below 2.0 and correspond to the coefficients of Responsiveness and Empathy respectively. This means the above coefficients are statistically not greater than zero. In other words their effect on customer loyalty is not significant. This is further proved by considering the P-values.

P-values of .05 or below are considered significant. From table 4.10, the P-values of the coefficients are as follows;

- Intercept – 0.000 (Significant)
- $T_A$  – 0.006 (Significant)
- $R_L$  - 0.000 (Significant)
- $R_S$  - 0.104 (Insignificant)
- $A_S$  - 0.000 (Significant)
- $E_M$  - 0.305 (Insignificant)

From the results we cannot be confident that customer perception of responsiveness and empathy have a real significance with customer loyalty in TGCL.

#### 4.5.4 Crosstab Analysis

Results across gender, educational level, customer type and branch were also analyzed. The median of each construct per observation was acquired in excel. The percentage of positive responses (agree and strongly agree) from customers for each construct was then calculated and cross referenced with gender, educational level, customer type and branch. The results are shown in the tables below.

**Table 4.11: Percentage of Positive Responses to Service Quality dimensions and Customer Loyalty across Gender**

	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Loyalty
Male	87%	88%	67%	84%	75%	87%
Female	77%	92%	69%	85%	73%	77%

Source: Field data, 2012

From Table 4.11, responses for customer loyalty were more favorable among males than females. Responses on perception of tangibles and empathy were also more positive among males. Female customers appreciated TGCL's service reliability, responsiveness and assurance more than the males. Generally perception of responsiveness and empathy generated the lowest percentage of positive response across both genders with reliability being the highest.

**Table 4.12: Percentage of Positive Responses to Service Quality dimensions and Customer Loyalty across Educational Level of customers**

	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Loyalty
Basic	88%	86%	74%	85%	82%	88%
Secondary	87%	91%	68%	85%	74%	87%
Tertiary	86%	87%	66%	84%	73%	85%

Source: Field data, 2012

Across educational levels (table 4.12), responses for customer loyalty were most favorable among customers with basic education. Tertiary level customers were generally the least positive in their perception of the service quality dimensions while their basic education counterparts were most positive. This is evident in their loyalty responses where a greater percentage of basic customers were loyal compared to tertiary level customers. This might be because they have a higher expectation of service quality.

Generally, positive perception of responsiveness and empathy was relatively low in percentage across all educational levels while reliability was the highest.

**Table 4.13: Percentage of Positive Responses to Service Quality dimensions and Customer Loyalty across TGCL branches**

	<b>Tangibles</b>	<b>Reliability</b>	<b>Responsiveness</b>	<b>Assurance</b>	<b>Empathy</b>	<b>Loyalty</b>
Accra	87%	89%	79%	85%	74%	86%
Tema	85%	85%	78%	80%	68%	80%
Kumasi	89%	91%	80%	82%	76%	87%
Tarkwa	84%	68%	74%	89%	84%	95%
BP	89%	89%	75%	78%	75%	86%

Source: Field data, 2012

Across the various TGCL branches (table 4.13), the highest percentage of favorable responses for customer loyalty was in the Tarkwa branch and the least was in Tema. Accra, Kumasi and BP branches had relatively good results as well. Per this analysis it can be concluded that Tarkwa customers are the most loyal while customers in Tema are the least. Tarkwa however had the lowest percentage of customer's positive perception of Tangibles, reliability and responsiveness while Kumasi, the second most loyal branch had the highest in these same areas. Tarkwa however had the highest in positive assurance and empathy perception with Tema having the lowest. Accra and BP branches generally had relatively impressive positive customer perception of their service quality as well. Once again, customers' positive perception of responsiveness and empathy were the lowest across all branches while reliability was the highest.

#### 4.5.5 Customer comments Analysis

Customer responses to the two open ended questions were collated and analyzed. Firstly, they were grouped into similar questions. They were then grouped under the five service quality dimensions for easy analysis. The questions asked were as follows;

46. *What in your opinion is more important to you in the delivery of a good car service?*

47. *Which of these will make you want to stay with this service provider?*

Customer comments centered round most of the issues mentioned in the questionnaire. Among key issues raised were the following;

A good number of customers said it is important that they are “*Confident vehicle is in good driving condition after service*” This tells a lot about customers expectation of a reliable service. Another important point they raised concerning their idea of good service delivery is the use of “*genuine parts*” during service of their cars. This strongly borders on reliability and assurance of good service. No wonder some customers mentioned the fact that “*assurance of a good service*” was top of their list of service quality expectations. Another frequent comment from respondents was to do with the ability of the service provider to “*deliver the vehicle on time*” as promised. This again borders on reliability. Customers talked a lot about tangible issues such as “*vehicles being neatly washed*” after service. Another point of interest raised by customers as important to them has to do with “*friendliness*” of the staff they deal with. As some put it, there should be a “*good relationship*” between staff and customers as a way of improving customer loyalty. One last issue which came up in customers’ comments as important to keeping them loyal is for service firms to offer “*motivational packages*” to them such as T-shirts, pens, key holders etc.

**Table 4.14: Statistics of comment types for Questionnaire Item 46**

<b>Question: What, in your opinion is more important to you in the delivery of a good car service</b>	<b>Number of Customers</b>	<b>Total</b>	<b>Service Quality Dimension</b>
Comments on Reliability issues	40	(45%)	Reliability
Comments on Tangibles issues	16	(18%)	Tangibles
Comments on assurance issues	15	(17%)	Assurance
Comments on Empathy issues	10	(11%)	Empathy
Comments on Responsiveness issues	7	(8%)	Responsiveness
<b>Total</b>	<b>88</b>	<b>100%</b>	

Source: Field data, 2012

From table 4.14, a total of 88 customers responded to question 46. Responses bordering on reliability were the highest (45%) followed by tangibles and then assurance. Responses on empathy and responsiveness were the lowest.

**Table 4.15: Statistics of comment types for Questionnaire Item 47**

<b>Question: Which of these will make you stay with this service provider (Loyalty)</b>	<b>Number of Customers</b>	<b>Totals</b>	<b>Service Quality Dimension</b>
Comments on Reliability issues	56	(51%)	Reliability
Comments on Tangibles issues	24	(22%)	Tangibles
Comments on assurance issues	13	(12%)	Assurance
Comments on Empathy issues	12	(11%)	Empathy
Comments on Responsiveness issues	4	(4%)	Responsiveness
	<b>109</b>	<b>100%</b>	

Source: Field data, 2012

Table 4.15 gives a summary of response types for question 47. 109 customers responded. Again, responses bordering on reliability were the highest (51%) followed by tangibles and then assurance. Responses on empathy and responsiveness were the lowest. Details of Responses for question 46 and 47 can be found in Appendix B.

#### 4.5.6 Summary of Analysis

- From the descriptive statistics and the correlation test results, a positive relationship exists between all the service quality dimensions and for that matter, service quality and customer loyalty. This is consistent with the findings of Berry (1995) which indicates that improving service quality will create customer loyalty.

The positive relationship between tangibles perception and customer loyalty indicates that when customers are happy with the tangibles aspects of a service, customer loyalty increases and vice versa.

The positive relationship between reliability perception and customer loyalty also suggests that, customers who are happy about how reliable a service is are likely to stay with the service firm. Thus, when they perceive reliability, they remain loyal. On the other hand, customers may switch or change service provider if reliability is perceived not to be good.

Responsiveness perception found to be positively related to customer loyalty suggests that the customers expect acts of responsiveness from service providers in order to be loyal.

The positive relationship between assurance perception and customer loyalty implies that increase in customer perception of assurance may lead to increase in customer loyalty and vice versa.

Empathy perception found to be positively related to customer loyalty suggests that the customers expect acts of empathy from service providers in order to be loyal.

- From the regression model, it is clear that all the service quality variables or dimensions had positive coefficients and therefore relate positively to customer loyalty. This is in line

with the other test results discussed above. It is consistent with the findings of Ruyter et al (1998), Boulding et al (1993) and Brady & Cronin (2001) who suggested that high degree of service quality translates into loyalty. Loyalty of customers is expected to increase when customers' service quality expectations are met. It can however be seen that responsiveness and empathy had the lowest coefficient values. Test of significance also showed similar trends where responsiveness and empathy variables were found to be of very little significance to customer loyalty. This means they had the least effects on variations in customer loyalty among TGCL customers. Lovelock (1983), Chowdhary and Prakash's (2007), have all attested to the fact that the importance of the various service quality dimensions will vary across service types and generalisation is not possible. It can be concluded that for TGCL customers, Tangibles, reliability and assurance may be more important in their decision to be loyal compared with responsiveness and empathy.

The regression model summary also brought out a significant issue which needs further study. The R-squared value obtained in the test was 0.64. This indicates that differences in the service quality variables together explain only about 64 percent of the variations in customer loyalty. Though the effect is strong enough, the error margin is also quite significant. It is an indication that changes in other factors not mentioned may also have effect on variations in customer loyalty. Studies conducted by Kyei, 2011 established that other factors such as price perception, brand loyalty and value offered have a positive effect on customer loyalty. There would be the need for a further study to find out which other factors may account for loyalty of TGCL customers aside the service quality.

- Cross analysis of the percentage of positive responses across gender revealed that male customers in TGCL were more loyal than their female counterparts.

Analysis across educational level revealed that a lower percentage of customers with tertiary education gave positive response to the both the customer loyalty and the service quality dimension items compared to the other educational levels. The most favorable responses were recorded among customers with basic education. Studies have shown that customers with high educational background tend to be pragmatic and value conscious in their assessment of service quality. (Kımlıođlu et al, 2010).

Comparing responses across TCGL branches revealed that Tarkwa branch had the highest percentage of loyal customers while Tema had the lowest.

Generally, high percentages of customer positive responses on loyalty were recorded in all the areas looked at. With the service quality dimensions, reliability and tangibles perceptions had the highest positive responses while responsiveness and empathy perception had the lowest.

- From the analysis of customers' open comments, it is obvious that customers' opinion of a good service and for that matter their loyalty is related to all the dimensions of service quality. However, their preferences seem to border more on reliability, tangibles and assurance of service. TGCL customers therefore seem to place more emphasis on these three dimensions compared to responsiveness and empathy.

In all the dimensions studied, reliability seems to be of the highest importance among respondents. This is in line with the findings of Parasuraman *et al* (1988) in their understanding of the importance of the various service quality dimensions that across a broad section of services, Reliability seemed to be the most important service quality dimension. A study by Brady and Cronin (2001) also confirm these findings.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 SUMMARY OF FINDINGS

In this research, the relationship between dimensions of service quality and customer loyalty in the automobile service industry was assessed using Toyota Ghana Company Limited and its customers as a case study. The summary of the findings are presented as follows.

Firstly, it was discovered that, customers' perception of the dimensions of service quality across all the branches of Toyota Ghana Company Limited is positively high and their level of loyalty is also high.

Secondly, there exists a positive relationship between each of the five dimensions of service quality (tangibles, reliability, responsiveness, assurance, empathy) and customer loyalty. An increase in customer perception of each of these results in a subsequent increase of customer loyalty, and vice versa. Thus, from customers' perspective, their perception of the tangibles within a service may affect customer loyalty. Again, confidence in the reliability of a vehicle service rendered may inform customer's decision to either switch or remain with the service provider. Furthermore, customer's feeling of a level of responsiveness shown by service providers may also lead to customer's decision to be loyal or not. In addition, Acts of assurance of service perceived by customers may inform their loyalty. Finally, the loyalty of customers may be affected by the amount of empathy they perceive to be demonstrated by a service provider.

Thirdly, for Toyota Ghana customers, their perception of tangibles, reliability and assurance dimensions of service rendered may be more important and significant to them and is more likely to affect their loyalty compared to responsiveness and empathy.

## **5.2 CONCLUSION**

This study is consistent and adds unto the finding of many researchers which have showed that service quality has influence on customers' loyalty to a service provider. This study also affirms that each of the dimensions of service quality has positive impact on customer loyalty. Ability of a company to retain and grow a number of loyal customers is considered as one of the most important assets of a company. Loyal customers contribute long-term profit to the business organizations (Tseng, 2007), (Reichheld and Sasser, 1990). Companies reduce costs of operations whiles significantly increasing consumers' lifetime revenues. It is therefore necessary for vehicle service providers to understand these dimensions of service and put in the right measures, in an attempt to make both new and existing customers stay loyal and increase their purchases to strengthen the financial growth of a company (Hayes, 2008).

Service quality was found to have positive relationship with customer loyalty. Thus, high degree of service quality translates into loyalty (Boulding et al., 1993, Brady and Cronin, 2001, Ranaweera and Neely, 2003, Pe´rez et al, 2007; Parasuraman et al, 1996). This research work has also proven and established that perception of service tangibles has a positive relation with loyalty of a customer. Furthermore, the research work has also added-on to the conclusion that, when service firms provide reliable services and increase the customer's trust, customer loyalty is improved. Again, the research has shown that

assurance of service and the level of responsiveness shown by a service firm can all determine the loyalty of customers in the long run. The study has also proven that how a service company provides care and individualized attention to its customers, in other words, empathy, can affect loyalty of customers.

Finally, the findings support the view points that service quality can enhance a buyer-seller relationship and in turn increase customer loyalty.

### **5.3 RECOMMENDATIONS**

The findings provide important evidence for managers in charge of service provision organizations. It is useful for providers of vehicle services in Ghana to appreciate the effectiveness of service quality from the consumer's perspective.

Further, this piece of work is purposely meant for all vehicle service managers, especially managers in charge of customer handling, decision makers and those who curve strategies for business growth. It is expected to serve as a guide and help them make informed judgment when it comes to meeting the present customer's need. As the competitive environment increasingly becomes fierce, the voice and preferences of the customers are also becoming the priority. This study provides insight and significant feedback from vehicle users to automobile service firms which could serve as an input to future improvement plans for customers and growth plans for businesses.

### **5.4 DIRECTIONS FOR FUTURE RESEARCH**

In this research, the sample used was selected at random from TGCL branches in

Accra, Tema, Kumasi and Tarkwa due to resource constraints. Further research could expand the sample size by selecting sample units from other vehicle service centers and automobile firms across Ghana in order to have a better representation of vehicle users in Ghana.

Several other factors influence a customer's decision to remain with a particular service provider. Previous studies found trust (Morgan and Hunt, 1994; Berry, 1995), satisfaction (Oliver, 1993; Cronin and Taylor, 1994, Jones and Suh, 2000), switching costs (White and Yanamandram, 2007; Burnham et al, 2003), image (Aydin and Gökhan Özer, 2005; Hess Jr, 2008) among other factors. Numerous researchers have tried to find relevant antecedents and their role in creating customer loyalty. Customer satisfaction, corporate image, word-of-mouth communication, perceived value have all been proposed as antecedents of loyalty (e.g., Wieringa & Verhoef, 2007; Patterson & Smith, 2003; Burnham et al., 2003; Jones et al., 2000). These and other factors such as commitment and customer behavior, which could influence customer loyalty in the research sample, have not been discussed in this study.

Moreover, during the analysis, it was discovered that in this research, all the variables of service quality could only account for about 64 percent of the variations in customer loyalty. This in itself points that there is the need to research further to discover all influences of customer loyalty in Toyota Ghana Company limited and in Ghana as whole.

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## APPENDIX A

### QUESTIONNAIRE

#### Service Quality and Customer Loyalty

*This questionnaire is designed to know your opinion on the quality of service provided by Toyota Ghana Company Limited. Your kind support is needed for the successful completion of this research. Your responses will be used for academic purpose only. Please attempt to answer all the questions and check one appropriate box that best suits your perspective for each statement.*

*Your participation in the study is greatly appreciated. Thank you very much for your time and assistance.*

#### PART ONE

##### ***Individual Characteristics***

1	Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>		
2	Educational Level	Basic <input type="checkbox"/>	Secondary <input type="checkbox"/>	Tertiary <input type="checkbox"/>	
3	Which customer type are you	Individual Veh.Owner <input type="checkbox"/>	Fleet Manager <input type="checkbox"/>	Driver <input type="checkbox"/>	Other <input type="checkbox"/> Please specify .....
4	At which Toyota Ghana Branch do you service your vehicle(s)	Accra <input type="checkbox"/>	Tema <input type="checkbox"/>	Kumasi <input type="checkbox"/>	Tarkwa <input type="checkbox"/> BP <input type="checkbox"/>

#### PART TWO

##### ***Tangibles Perception***

1	This service firm has neat and clean facility/property	Strongly Disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Neutral <input type="checkbox"/>	Agree <input type="checkbox"/>	Strongly Agree <input type="checkbox"/>
2	This service firm has good directional signs on the route and within the premises	Strongly Disagree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Neutral <input type="checkbox"/>	Agree <input type="checkbox"/>	Strongly Agree <input type="checkbox"/>

3	This service firm has enough parking places	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
4	Staff of this firm look presentable	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
5	This service firm provides comfortable seating whiles I am waiting	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
6	This service firm serves me coffee, etc., when I am waiting	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
7	The Reception area is well branded with promotional materials.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
8	This service firm ensures my vehicle is clean after maintenance	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
9	This service firm has provision to repair my vehicle under warranty when the need arises.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
10	This service firm provides a checklist of things checked on my vehicle.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
11	This service firm provides a clear and distinct invoice for services rendered.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
12	This service firm provides a replacement (Courtesy) car when I bring mine for service.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

### ***Reliability Perception***

13	This service firm is good at keeping appointments	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
14	This service firm is flexible when I am sometimes late for my appointments	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

15	This service firm fixes my vehicle right the first time.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
16	I feel confident driving when my vehicle is delivered to me after a service.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
17	This service firm provides estimates of work to be done	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
18	This service firm ensures my vehicle is ready at the promised time.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
19	This service firm gives clear explanation of invoices	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

### ***Responsiveness Perception***

20	This service firm is prompt in solving my complaints	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
21	This service firm attends to my needs quickly	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
22	This service firm gives me explanations on why a repair is being effected.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
23	This service firm is able to provide maintenance service on short notice when I need one.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
24	This service firm answers my telephone calls quickly	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
25	This service firm has service advisors who I can talk to concerning updates and other enquiries on my vehicle	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

### ***Assurance Perception***

26	This service firm has skillful employees	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
27	The advice of staff are trustworthy	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
28	This service firm has courteous employees	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
29	With this service firm, it is easy to tell the various options of service available	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
30	This service firm communicates the risk of repairs to me	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
31	This service firm contacts me for approval when extra repairs are needed	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
32	In this service firm, I can know which mechanic worked on my vehicle.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

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### ***Empathy Perception***

33	In this service firm, personal attention is given to me.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
34	In this service firm, staff attend to me in a friendly way.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
35	In this service firm, staff always contact me after service to know if I am satisfied	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
36	This service firm agrees with me on the mode of payment before service	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

37	In this service firm, staff call me by my name	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
38	In this service firm, it is possible to deliver vehicles to me outside normal hours.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
39	This service firm has convinient operating hours	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

**Customer Loyalty**

40	I intend to continue using services from this this firm for a long time.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
41	If I have an additional vehicle, I am willing to continue using this service provider.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
42	Even if an alternative service firm's price is lower; I will go on using this firm.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
43	I am willing to say positive things about this service firm to other people.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
44	I will encourage friends and relatives to use the services offered by this firm.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]
45	To me, this firm clearly is able to provide the best service.	Strongly Disagree [ ]	Disagree [ ]	Neutral [ ]	Agree [ ]	Strongly Agree [ ]

46. What in your opinion is more important to you in the delivery of a good car service

47. Which of these will make you want to stay with this service provider

**Table 5.1: Reference Table for Questionnaire**

Construct	Items	Reference
<b>Tangibles Perception</b>	This service firm has neat and clean facility/property	Bouman and Wiele (1992)
	This service firm has good directional signs on the route and within the premises	
	This service firm has enough parking places	
	Staff of this firm look presentable	
	This service firm provides comfortable seating whiles I am waiting	
	This service firm serves me coffee, etc., when I am waiting	
	The Reception area is well branded with promotional materials.	
	This service firm ensures my vehicle is clean after maintenance	
	This service firm has provision to repair my vehicle under warranty when the need arises.	
	This service firm provides a checklist of things checked on my vehicle.	

	This service firm provides a clear and distinct invoice for services rendered.	
	This service firm provides a replacement (Courtesy) car when I bring mine for service.	
<b>Reliability Perception</b>	This service firm is good at keeping appointments	Bouman and Wiele (1992)
	This service firm is flexible when I am sometimes late for my appointments	
	This service firm fixes my vehicle right the first time.	
	I feel confident driving when my vehicle is delivered to me after a service.	
	This service firm provides estimates of work to be done	
	This service firm ensures my vehicle is ready at the promised time.	
	This service firm gives clear explanation of invoices	
<b>Responsiveness Perception</b>	This service firm is prompt in solving my complaints	Bouman and Wiele (1992)
	This service firm attends to my needs quickly	
	This service firm gives me explanations on why a repair is being effected.	
	This service firm is able to provide maintenance service on short notice when I need one.	
	This service firm answers my telephone calls quickly	
	This service firm has service advisors who I can talk to concerning updates and other enquiries on my vehicle	
<b>Assurance Perception</b>	This service firm has skillful employees	Bouman and Wiele (1992)
	The advice of staff are trustworthy	

	<p>This service firm has courteous employees</p> <p>With this service firm, it is easy to tell the various options of service available</p> <p>This service firm communicates the risk of repairs to me</p> <p>This service firm contacts me for approval when extra repairs are needed</p> <p>In this service firm, I can know which mechanic worked on my vehicle.</p>	
<b>Empathy Perception</b>	<p>In this service firm, personal attention is given to me.</p> <p>In this service firm, staff attend to me in a friendly way.</p> <p>In this service firm, staff always contact me after service to know if I am satisfied</p> <p>This service firm agrees with me on the mode of payment before service</p> <p>In this service firm, staff call me by my name</p> <p>In this service firm, it is possible to deliver vehicles to me outside normal hours.</p> <p>This service firm has convenient operating hours</p>	Bouman and Wiele (1992)
<b>Customer Loyalty</b>	<p>I intend to continue using services from this this firm for a long time.</p> <p>If I have an additional vehicle, I am willing to continue using this service provider.</p> <p>Even if an alternative service firm's price is lower; I will go on using this firm.</p> <p>I am willing to say positive things about this service firm to other people.</p> <p>I will encourage friends and relatives to use the services offered by this firm.</p>	<p>1. Aydin and Özer, (2005);</p> <p>2. Wulf et al. (2001);</p> <p>3. Morgan and Hunt (1994); etc.</p>

	To me, this firm clearly is able to provide the best service.	
<b>General question</b>	46. What in your opinion is more important to you in the delivery of a good car service	Bouman and Wiele (1992)
	47. Which of these will make you want to stay with this service provider	

Source: Research data, 2012

## APPENDIX B

**Table 5.2: Descriptive statistics for Tangibles**

Construct	Question	No of Resp.	Mean	Median	Standard Deviation	Cronbach Alpha
<b>Tangibles</b>	This service firm has neat and clean facility/property	511.00	4.09	4.00	0.73	0.711
	This service firm has good directional signs on the route and within the premises	511.00	3.67	4.00	1.03	
	This service firm has enough parking places	511.00	2.77	3.00	1.26	
	Staff of this firm look presentable	511.00	4.10	4.00	0.66	
	This service firm provides comfortable seating whiles I am waiting	511.00	4.04	4.00	0.87	
	This service firm serves me coffee, etc., when I am waiting	511.00	3.85	4.00	1.10	
	The Reception area is well branded with promotional materials.	511.00	3.30	4.00	1.16	
	This service firm ensures my vehicle is clean after maintenance	511.00	3.76	4.00	0.96	

	This service firm provides a checklist of things checked on my vehicle.	511.00	3.93	4.00	0.91
	This service firm provides a clear and distinct invoice for services rendered.	511.00	4.08	4.00	0.85
	This service firm provides a replacement (Courtesy) car when I bring mine for service.	511.00	2.71	3.00	1.32

Source: Field data, 2012

**Table 5.3: Descriptive statistics for Reliability**

Construct	Question	No of Resp.	Mean	Median	Standard Deviation	Cronbach Alpha
<b>Reliability</b>	This service firm is good at keeping appointments	511	3.94	4.00	0.87	0.74
	This service firm is flexible when I am sometimes late for my appointments	511	3.84	4.00	0.80	
	This service firm fixes my vehicle right the first time.	511	3.92	4.00	0.82	
	I feel confident driving when my vehicle is delivered to me after a service.	511	4.13	4.00	0.76	
	This service firm provides estimates of work to be done	511	3.99	4.00	0.77	
	This service firm ensures my vehicle is ready at the promised time.	511	3.52	4.00	1.06	
	This service firm gives clear explanation of invoices	511	3.96	4.00	0.82	

Source: Field data, 2012

**Table 2 : Descriptive statistics for Responsiveness**

Construct	Question	No of Resp.	Mean	Median	St. Dev.	Cronbach Alpha
<b>Responsiveness</b>	This service firm is prompt in solving my complaints	511	3.65	4.00	0.92	0.741
	This service firm attends to my needs quickly	511	3.59	4.00	0.94	
	This service firm gives me explanations on why a repair is being effected.	511	3.72	4.00	0.93	
	This service firm is able to provide maintenance service on short notice when I need one.	511	3.54	4.00	0.97	
	This service firm answers my telephone calls quickly	511	3.74	4.00	0.98	
	This service firm has service advisors who I can talk to concerning updates and other enquiries on my vehicle	511	4.02	4	0.89	

Source: Field data, 2012

**Table 5.5: Descriptive statistics for Assurance**

Construct	Question	No of Resp.	Mean	Median	Standard Deviation	Cronbach Alpha
<b>Assurance</b>	This service firm has skillful employees	511	4.02	4.00	0.74	0.719

The advice of staff are trustworthy	511	3.95	4.00	0.72
This service firm has courteous employees	511	3.98	4.00	0.70
With this service firm, it is easy to tell the various options of service available	511	3.81	4.00	0.78
This service firm communicates the risk of repairs to me	511	3.71	4.00	0.89
This service firm contacts me for approval when extra repairs are needed	511	3.82	4.00	0.94
In this service firm, I can know which mechanic worked on my vehicle.	511	3.17	3.00	1.27

Source: Field data, 2012

**Table 5.6: Descriptive statistics for Empathy**

Construct	Question	No of Resp.	Mean	Median	Standard Deviation	Cronbach Alpha
<b>Empathy</b>	In this service firm, personal attention is given to me.	511	3.76	4.00	0.86	0.731
	In this service firm, staff attend to me in a friendly way.	511	4.09	4.00	0.73	
	In this service firm, staff always contact me after service to know if I am satisfied	511	3.63	4.00	1.12	
	This service firm agrees with me on the mode of payment before service	511	3.65	4.00	1.00	
	In this service firm, staff call me by my	511	3.42	4.00	1.10	

	name				
	In this service firm, it is possible to deliver vehicles to me outside normal hours.	511	3.11	3.00	1.09
	This service firm has convenient operating hours	511	3.83	4.00	0.78

Source: Field data, 2012

**Table 5.7: Descriptive statistics for Customer Loyalty**

Construct	Question	No of Resp.	Mean	Median	St. Dev.	Cronbach Alpha
<b>Customer Loyalty</b>	I intend to continue using services from this firm for a long time.	511	4.11	4	0.76	0.814
	If I have an additional vehicle, I am willing to continue using this service provider.	511	4.07	4	0.70	
	Even if an alternative service firm's price is lower; I will go on using this firm.	511	3.61	4	1.00	
	I will encourage friends and relatives to use the services offered by this firm.	511	4.04	4	0.72	
	To me, this firm clearly is able to provide the best service.	511	4.08	4	0.76	

Source: Field data, 2012

**Table 5.8: Tangibles Perception Frequency Response Table**

<b>TANGIBLES</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	3	.6	.6	.6
Disagree	8	1.6	1.6	2.2
Neutral	56	11.0	11.0	13.1
Agree	385	75.3	75.3	88.5
Strongly Agree	59	11.5	11.5	100.0
Total	511	100.0	100.0	

Source: Field data, 2012

**Table 5.9: Reliability Perception Frequency Response Table**

<b>RELIABILITY</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1.0	1.0	1.0
	Disagree	8	1.6	1.6	2.5
	Neutral	46	9.0	9.0	11.5
	Agree	382	74.8	74.8	86.3
	Strongly Agree	70	13.7	13.7	100.0
	Total	511	100.0	100.0	

Source: Field data, 201

**Table 5.10: Responsibility Perception Frequency Response Table**

		<b>RESPONSIVENESS</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.6	.6	.6
	Disagree	22	4.3	4.3	4.9
	Neutral	83	16.2	16.2	21.1
	Agree	328	64.2	64.2	85.3
	Strongly Agree	76	14.7	14.7	100.0
	Total	511	100.0	100.0	

Source: Field data, 2012

**Table 5.11: Assurance Perception Frequency Response Table**

		<b>ASSURANCE</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	.4	.4	.4
	Disagree	9	1.8	1.8	2.2
	Neutral	70	13.7	13.7	15.9
	Agree	365	71.4	71.4	87.3
	Strongly Agree	65	12.7	12.7	100.0
	Total	511	100.0	100.0	

Source: Field data, 2012

**Table 5.12: Empathy Perception Frequency Response Table**

<b>EMPATHY</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	6	1.2	1.2	1.2
Disagree	25	4.9	4.9	6.1
Neutral	99	19.4	19.4	25.4
Agree	326	63.8	63.8	89.2
Strongly Agree	55	10.8	10.8	100.0
Total	511	100.0	100.0	

Source: Field data, 2012

**Table 5.13: Customer Loyalty Frequency Response Table**

<b>CUSTOMER LOYALTY</b>				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	5	1.0	1.0	1.0
Disagree	4	.8	.8	1.8
Neutral	61	11.9	11.9	13.7
Agree	330	64.6	64.6	78.3
Strongly Agree	111	21.7	21.7	100.0
Total	511	100.0	100.0	

Source: Field data, 2012

**Table 5.14: Details of Responses for Questionnaire Item 46**

What, in your opinion is more important to you in the delivery of a good car service	Number of Customers	Total	Service Quality Dimension
Assurance of a good service	7	15 (17%)	Assurance
Staff well skilled in customer handling and communication	2		
Advice on proper maintenance of vehicle	2		
Benchmarking to improve and satisfy customers	1		
Good coordination between Toyota branches and departments to satisfy customers	1		
Professional handling	1		
Educate car owners and drivers on proper use of vehicles.	1		
Friendliness	5	10 (11%)	Empathy
Working on weekends	3		
Post service follow-up	1		
Ability to service old cars into shape	1		
Confident vehicle is in good driving condition after service	10	40 (45%)	Reliability
Provision of genuine parts	9		
On time delivery	6		
Competent and efficient service	2		
First class delivery	2		
Excellent service	2		
Safety of vehicle	1		
Improve on your delivery time	1		
Vehicle well fixed always	7		
Quick and efficient service	1		
Availability of parts	1		
Getting adequate information during service	1		
Promptness of booking appointments	1		
Listen to customers and attend to their needs	1		
Waiting time	1		
Responsiveness	1		
Vehicle neatly washed	6	16 (18%)	Tangibles
Provide Motivational packages eg. T-shirt	2		
Clear direction to the shop	1		
Enough parking space	1		
Bigger service centre in Accra	1		
Return parts of cars replaced	1		
Moderate pricing	4		
<b>Total</b>	<b>88</b>		

Source: Field data, 2012

**Table 5.15: Details of Responses for Questionnaire Item 47**

Which of these will make you stay with this service provider (Loyalty)	Number of Customers	Totals	Service Quality Dimension
Quality assurance	3	13 (12%)	Assurance
Well trained staff	2		
Good customer care	4		
Courteous staff	4		
Good relationship	5	12 (11%)	Empathy
Friendliness	4		
Warm reception	2		
Personal attention is given to me	1		
Use of genuine spare parts	12	56 (51%)	Reliability
Good service	7		
Punctuality	5		
Satisfactory service	5		
Reliability is assured	4		
Promise time is met	3		
Offers the best service	3		
Fixing it right the first time within the promised time	3		
Safety and quality maintenance	3		
Excellent service	3		
Accuracy of service	2		
Improve delivery time	4		
Good servicing	2		
Prompt attention	3		
Waiting time	1		
Motivational packages eg. T-shirt, pen	5	24 (22%)	Tangibles
Provide lunch	2		
Provide training for co-operate drivers	1		
Introduce customer loyalty programs	2		
Grant Credit facility	2		
Quality service with reasonable pricing	4		
Price	1		
Moderate cost	7		
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Source: Field data, 2012