

PROFIT AND SERVICE QUALITY IN SELECTED MOTOR RETAILERS FOR SERVICING
OF PASSENGER VEHICLES

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Declaration

I, Riccardo Angelo Cipolat (0308592H), am registered for MECN8000, Masters of Science in Engineering (Industrial) in the year 2010. I herewith submit the following thesis, "Profit and Service in Selected Motor Retailers for Servicing of Passenger Vehicles" in fulfilment of the requirements for the above course.

I hereby declare the following:

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Abstract

In this research the link between a measure of profit and service quality was investigated. The service quality was measured through two models: SERVQUAL and SERVPERF. SERVQUAL measured the service quality through the expectations the interviewees had, of the service to come, and their perceptions of the service received. SERVPERF measured service quality by means of the perceptions of the interviewees. Both models were completed by the customers and employees of the dealership. At the same time the results gathered from the SERVPERF data were then compared to the findings measured in the industry. The latter included the Synovate Quality Awards and the J.D. Power and Associates Customer Satisfaction Index (CSI) StudySM. Only SERVPERF was used in this comparison as it measured perceptions similar to those of Synovate and J.D. Power and Associates. The effect on service quality due to the type of employment within which the customers are involved, was also investigated during this research. Finally the results of the SERVQUAL and SERVPERF models were evaluated with a series of statistical tests and comparisons.

The results of this research, indicated that neither SERVQUAL nor SERVPERF had a positive relationship with a measure of profit measured “today” and therefore no correlations could be made. Also concluded from this research was the fact that no difference between the way in which the SERVQUAL and SERPVERF models measured service quality was found. This, therefore, did not allow one to choose a superior model for the measurement of service quality. Finally, it was recommended that this type of research continue but the effect of service quality measured “today” and its effect on a measure of profit for “tomorrow” be investigated.

Dedication

I dedicate this project to my family:

My father Daniele, my mother Francesca and my brother Alberto Cipolat for all the advice and support they have given me throughout the project. Grazie mille.

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List of Abbreviations

TQS	-	Total Quality Service
TQM	-	Total Quality Management
SPC	-	Statistical Process Control
TQC	-	Total Quality Control
SQ	-	Service Quality
CSI	-	Customer Satisfaction Index
CCSI	-	Competitive Customer Satisfaction Index
LCV	-	Light Commercial Vehicle
MCV	-	Medium Commercial Vehicle
HCV	-	Heavy Commercial Vehicle
EQ1	-	Expectation Question 1
PQ1	-	Perception Question 1
<i>df</i>	-	Degrees of Freedom

1. Introduction

1.1 Background

In the local motor industry Customer Satisfaction plays an important role in the retention of customers and the profitability of a motor dealership. Currently the Competitive Customer Satisfaction Index (CCSI) and Customer Satisfaction Index (CSI) Study are being used to 'grade' dealerships. The grading received determines the bonus allowances which dealerships receive from the manufacturers. The higher the 'grading' the larger the bonuses received.

In a study done by Kiff *et al.* (2001) Customer Fulfillment was defined as a measure of "Right First Time, On Time, Every Time" for New, Used and After Sales processes in the motor industry. It was also found that achieving a 100% Customer Fulfillment would eliminate many causes of customer dissatisfaction and also reduce costs. However, it is important to note that a Customer Fulfillment measurement does not replace a Customer Satisfaction measurement. The definition of Customer Fulfillment as opposed to Customer Satisfaction will emphasise that these concepts differ and that the one depends upon the other.

Customer Fulfillment is the measure of how companies meet the expressed needs of customers, right first time, on time, every time, by optimising processes and eliminating errors.

Instead Customer Satisfaction refers to how a customer feels after being rendered a service, depending on the customer's expectations and perceptions and how well or not the expectations have been met.

Kiff *et al.* (2001, p.5) demonstrate the link between Customer Satisfaction, Customer Fulfillment, Customer Retention and Profit which can be seen in Figure 1.1. This figure shows the fulfillment-satisfaction-profit chain. The first link in the chain is Customer Fulfillment and this entails performing the basics correctly. This can be done through improving system processes. This may lead to Customer Satisfaction, which improves Customer Retention, which in turn

finally creates the level of profit. During this research the latter, link between Customer Satisfaction and Profit, will be investigated.

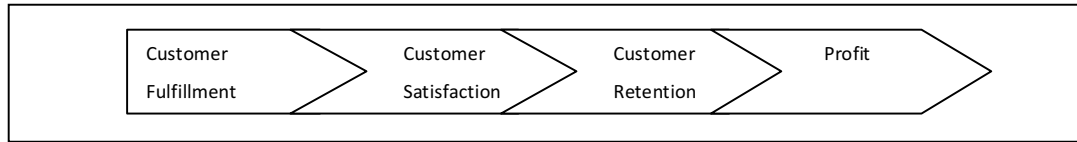


Figure 1.1: Fulfillment-Satisfaction-Profit (Kiff *et al.*, 2001)

1.2 Problem Statement

In this research the processes behind measuring the service quality and Customer Satisfaction are investigated and possible improvements and recommendations will be suggested for future processes. The effect that these processes have on the profitability of a dealership will then be investigated.

1.3 Research Objectives

The primary objective of this research is to examine whether there is a relationship between Service, as measured by Service Quality, and Profit in various South African Motor Dealerships.

This will be achieved through:

- Measuring the expectations and perceptions of the customers and employees of the dealership, using the SERVQUAL and SERVPERF models. (The two models used during this research)
- Comparing the Gap between the scores of the customer and those of the employees. i.e. Gap 1 of the Gap Model.
- Comparing the results of the SERVQUAL and SERVPERF models.
- Finally, a comparison between SERVQUAL and SERVPERF and current methods that measure Customer Satisfaction, used in the local motor industry, is set out. These include the Synovate Quality Awards measured through its Competitive Customer Satisfaction Index (CCSI) and the J.D. Power and Associates South African Customer Satisfaction Index (CSI) StudySM.

1.4 Approach

To achieve these objectives the following approach will be used:

1.4.1 Firstly, a literature survey will be performed and the following information will be gathered:

- The background of Service Quality and how it is measured it will be investigated. The link between profit and service as well as how this has been measured previously, will be researched. Past research on various service quality models and results achieved from those models will also be considered. Finally, a model to be used during this research will then be selected.
- A presentation of the various types of questionnaires and their different methods of administration will be supplied.

1.4.2 Secondly, data will be collected using the selected Service Quality model. Various methods of administering the questionnaire will be used. The method found to best fit the applications of this research will then be used.

1.4.3 Thirdly, a comparison/analysis of profit and the service quality data collected will be made and the other sub-objectives executed.

1.4.4 Based on the findings of these analyses a discussion will be put together and conclusions drawn.

1.5 Research Limitations

The various research limitations that can occur during this research are:

- The sample size. The sample size compared to the motor industry size in Gauteng is small therefore results or trends generated in this research might not be a complete reflection of the market. Also, the smaller sample size will be more affected by bias. i.e. A supporter of Manufacturer A might find it increasingly difficult to criticize that specific manufacturer.
- The dealership size and manufacturers selected. These create a limitation on this research as the dealership size and manufacturers selected only form 30% of those chosen compared to the already existing Customer Satisfaction models from Synovate

and J.D. Powers whose models are performed across all manufacturers and dealerships in the country. At the same time the trends identified at the dealerships selected may not necessarily apply to the dealerships and manufacturers not selected.

- Differing interpretations of questions in the survey. Customers may interpret the questions asked in a different manner and as a result the data collected could be skewed.
- Non-responsive interviewees. This will help to reduce the sample size and therefore trends found at the various dealerships may not apply to other dealerships and manufacturers of the same brand.
- Another limitation of this research is the frame in which this research is conducted. The findings from the Johannesburg and Pretoria area might not reflect what occurs in other major cities such as Cape Town or Durban.
- Finally, when making a comparison between this research and those of Synovate and J.D. Powers the sample size will again have an effect as the studies done by Synovate and J.D. Powers are undertaken on a national level while this research is only carried out on specific dealerships.

1.6 Report Structure

Chapter 1: This chapter gives a brief background about the field of interest in which this research will take place. After this the objectives and the approach which will be used are stated. This is then followed by a description of some of the limitations which one can experience during this research. The chapter is concluded with a description of the structure and layout of the report.

Chapter 2: Chapter 2 provides a brief overview of the literature available relating to the various topics covered during this research. The first of these topics includes Service Quality and its origins. Also presented are the definitions, dimensions and measurement tools for Service Quality. The two models (SERVQUAL and SERVPERF) to be used during this research are then presented. Topics such as profit measurement and the service profit chain are then introduced. The topic to follow provides some information on the current trends in the South African Motor Industry.

Chapter 3: Here, an introduction to the sampling frame is given as well as the literature and background of the tools to be used during this research. Following that the various types of surveys and selection methods are discussed. Administrative methods and sampling techniques are then outlined. The questionnaire to be used is also presented in this chapter. The chapter concludes with a discussion around the questionnaire design and also the pilot survey which is to be performed.

Chapter 4: In chapter 4 the data collected across all the dealerships is presented. An explanation of how the data is split and an explanation of the content of each Table is given.

Chapter 5: The results generated from the data collected are shown in this chapter. Sample calculations of all service quality component calculations are undertaken. Also shown are sample calculations of any statistical testing carried out.

Chapter 6: The results obtained in Chapter 5 are discussed in this chapter and any patterns or trends that arise are interpreted and discussed.

Chapter 7: In chapter 7 any conclusions made from the research and its findings are presented. Included in this chapter are also the recommendations for future studies.

2. Literature Survey

2.1 Introduction

Service quality and its origin are introduced in this chapter. The key factors influencing service quality are then discussed. These factors include the definitions of customer expectations and perceptions. This is followed by an introduction of the service quality dimensions and then a discussion about the existing models for measuring service quality. Lastly, a selection of the models to be used in this research, is outlined.

A background of SERVQUAL and its development is then provided. This is followed by a presentation of a wide variety of past applications of SERVQUAL, within various service industries. Similarly, the background of SERVPERF will be presented and past research will be discussed. The methods currently being used in the motor industry to measure customer satisfaction are then reviewed.

Following on from this, the measurement of profit and the various types of profit are established. This is followed by a discussion showing the link between the measurement of service quality and profit.

Finally a description of the South African motor industry is provided. An overview of the various sectors which make up the industry is then supplied and any trends which exist in the market are discussed.

When analysing service quality there are specific concepts and definitions one must understand and take into account before considering the various models which measure service quality. These concepts include customers' expectations and perceptions and the dimensions which constitute service quality. Next the definitions and differences between service quality and customer satisfaction are to be considered. The separation of these two terms is vital during this research as a comparison between the two will be undertaken later. At the same time an understanding of reliability and validity is required as these tests are used to authenticate the

data collected during this research. The dimensions used to measure service quality will be discussed later in the literature.

To better understand the terms 'expectations' and 'perceptions' a general definition of each will be provided.

2.1.1 Customer Expectations Defined

'Expectation' is defined as 'the act of expecting or state of being expected; anticipation' (World Book Dictionary, 1993, p. 748), while 'to expect' is defined as 'to think something will probably occur or happen' or 'to look forward with reason or confidence; desire and feel sure of getting'. (World Book Dictionary, 1993, p. 748) Therefore, when one refers to customer expectations with respect to service quality, expectations are the customer's desires and what he/she hopes will happen during his/her service encounter.

2.1.2 Customer Perceptions Defined

'Perception' is defined as 'the act of perceiving'. (World Book Dictionary, 1993, p. 1548) Perceive is defined as 'to be aware of through the senses: see, hear, taste, smell or feel' or 'to take in with the mind or observe'. (World Book Dictionary, 1993, p. 1547)

Therefore, when one refers to a customer's perceptions with respect to service quality, this implies a customer observing the service experienced through the use of his/her senses and weighing the service encounter up in terms of his/her senses.

2.1.3 Service Quality and Customer Satisfaction

Service quality can simply be defined as the difference between customers' expectations and perceptions. Customer satisfaction can be defined as the level of satisfaction provided by a product or by the service of a company. In this research Customer Satisfaction will be measured through the use of Service Quality models whereby one can compare the expectations and perceptions of the customers interviewed. With the use of the selected service quality models

one will be able to generate a quality score. This score will indicate the customer's level of satisfaction for the service received.

2.2 Service Quality

2.2.1 Origin and Evolution of Total Quality Service

Milakovich (1995, p.12) states that the development or growth of the total quality service (TQS) movement is a combination of a variety of American and Japanese philosophies and strategies. Even though a larger number of Japanese firms first succeeded in applying the strategy later known as 'Total Quality Management' (TQM) in the United States, numerous Americans are recognised internationally as the intellectual founders of the concept. It has become apparent in the literature studied that it is extremely important that a quality approach that matches the working culture of an organisation is selected. (Milakovich, 1995 p.12)

Milakovich (1995) details that the evolution of service quality and total service quality started in the 1920's. He suggests that Shewhart first introduced statistical process control (SPC) charts to monitor quality in mass production manufacturing. During the 1930's, SPC techniques were expanded at the Western Electrical Bell Labs factory in Chicago by Shewhart and Deming. The techniques developed in SPC provided an efficient process for controlling the quality of mass produced goods. As a result, during World War II these techniques were expanded, improved and applied successfully to the mass production of weapons. Experiences that developed during the war about various manufacturing techniques were mostly forgotten in the "boom" years afterwards. Therefore, due to the absence of competition, American industry leaders incorrectly assumed that their product and management systems were superior.

During the early 1950's Feigenbaum formulated the phrase 'Total Quality Control' (TQC), at approximately the same time, while the Americans occupied Japan, after the war Deming and Juran were asked by General MacArthur to inform the Japanese in SPC techniques. Both Juran and Deming met and influenced Ishikawa, who became Japan's leading expert in company-wide quality control (CWQC). Crosby made the public more aware of the importance of quality at a time when few doubtful managers listened. A timeline which captures the evolution of the TQS concept can be seen in Figure 2.1.

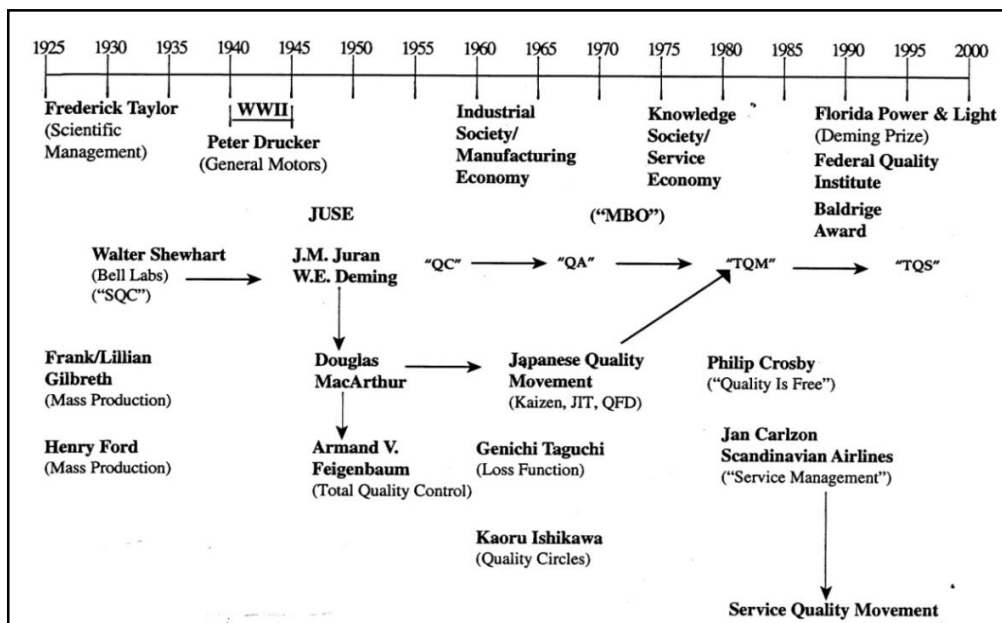


Figure 2.1: Evolution of Total Quality Service, Milakovich (1995, p.14)

Since the early 1950's Japanese manufacturing firms have used SPC (Statistical Process Control). These principles have developed into a team-based management philosophy called TQC or CWQC. Statistical quality control was strongly motivated by powerful political and economic forces; the most prominent was the Union of Japanese Scientists and Engineers (JUSE). JUSE was formed in 1947 with about 60 members. It was established with the main objective of guiding and directing Japan's economic rebirth. Presently, there are about 2000 members, principally business leaders and professors, who teach and practice TQC methods and theories. However, up until the mid 1980's no recognised groups in America encouraged the quality control effort.

As a result, the concept of creating quality goods/products struggled to reach American firms. The techniques and theories used behind TQM were ignored and the more orthodox approach of a top-down, hierarchical management by objectives, was maintained and supported. Leading quality theorists disputed these types of approaches and stressed the need to change work environments to achieve customer driven quality goals. Deming developed his teaching into fourteen points. These points were developed to guide American quality and productivity improvement efforts. Juran's approach is less prescriptive but stresses the importance of cross-functional management and attaining break-throughs by using teamwork and process

improvements. Deming and Juran both agreed on the relevance of teams and stress that at least 85 percent of an organisation's quality problems are influenced by management control. The third theorist Ishikawa strongly understood the significance of self-managed work teams, statistical control, continual training and worker participation. (Milakovich, 1995 p.14)

Milakovich continues to explain that studies done by Deming (1986); Scherkenbach (1988, 1991); Gabor (1990); and the U.S. General Accounting Office (1991) showed that changes in the working environment together with management systems which were designed to monitor and improve quality continuously, have achieved notable increases in quality, productivity and competitive position. The necessity to transform management attitudes, change organisational structures, and alter performance appraisal and reward systems, to obtain employee buy-in for customer service, has become widely recognised. This can be seen in research by Albrecht (1992); Albrecht and Zemke (1985); Berry (1990); Clemmer (1992); Gilbert (1992); Ouchi (1984); Peters (1987, 1992); Rosander (1989); Zeithaml et al. (1990) and Zemke and Schaaf (1989). In this literature the organisational changes essential to implement TQS are suggested in concepts such as employee empowerment and process ownership.

While there is growing agreement that a broad participation is required to implement service quality, several different theories exist which explain how best to improve an organisation's work environment; some of these "methods" are listed below: (Milakovich, 1995, p.15)

- One theory is based on statistics and aims to improve process control and the ability to measure quantify and reduce variation within the firm.
- Another theory places emphasis on marketing and customer satisfaction by measuring the gaps that exist between customers' expectations and perceptions and in so doing motivating employees to provide a better customer service. In other words how the firm interacts within the market.
- Other theories place a larger importance on the need to change the behaviour of top management to direct the change effort from the top down. In this case the structure of the firm is questioned.

Recently, research by Hammer and Champy (1993) stressed the process of re-engineering to re-design business systems. These researchers also expanded these principles by identifying

critical internal processes, by focusing on customer requirements and re-visioning the mission of the organisation. As knowledge and approval of quality improvement theories increase, the above approaches may grow into a common set of principles which show successful applications in both the service and manufacturing industries.

From the research undertaken in the previous pages, it is evident that service quality is affected by a change in attitude of management and different checks and balances that are implemented to measure and monitor service quality. These elements may have a positive effect on the delivery of service quality, which in turn may increase profitability. Therefore, to gain a further understanding of the development of service quality the various dimensions that make up service quality will now be introduced. This will be followed by a discussion about how service quality is measured.

2.2.2 Dimensions of Service Quality

Before one can look at the various types of service quality models a basic understanding of the general dimensions used when talking about service quality should be understood. General dimensions were developed by Parasuraman *et al.* (1990, p 17-20). Their study was performed on 12 focus groups which supplied a good insight into the conditions customers use for assessing service quality. Various examples and experiences used by customers offered a deeper understanding of their expectations. This could be seen through specific questions customers would ask or answer while evaluating service quality. (Parasuraman *et al.*, 1990)

After having processed these questions Parasuraman *et al.* (1990, p 20) identified ten general dimensions. These dimensions and their definitions are listed in the Table 2.1.

Table 2.1: Ten Dimensions & Definitions of Service Quality (Parasuraman *et al.*, 1990, p 21-22)

DIMENSIONS	DEFINITIONS
Tangible	Appearance of physical facilities, equipment, personnel, and communications materials.
Reliability	Ability to perform the promised service dependably and accurately.
Responsiveness	Willingness to help customers and provide prompt service.
Competence	Possession of the required skills and knowledge to perform the service.
Courtesy	Politeness, respect, consideration, and friendliness of contact personnel.
Credibility	Trustworthiness, believability, honesty of the service provider.
Security	Freedom from danger, risk, or doubt.
Access	Approachability and ease of contact
Communication	Keeping customers informed in a language they can understand as well as listening to customers.
Understanding the Customer	Making the effort to know customers and their needs.

Parasuraman *et al.* (1990, p 20) state that the ten dimensions are not necessarily independent of one another. This is a result of the focus-group research being more qualitative. With a quantitative research one would be able to narrow down the ten dimensions.

From the study performed by Parasuraman *et al.* (1990) it was found that the definition of service quality is the difference between customers' expectations and perceptions. Factors like word-of-mouth communication, personal needs, past experience and external communication have an effect on customer's expectations; and the ten dimensions listed above were identified as the criteria customers used to measure service quality. This is not to say that this is the only definition of service quality. In the section to follow the many models used to measure service quality will be discussed.

2.2.3 Measurement of Service Quality

When investigating the different ways of measuring service quality over 20 different service quality models were identified. Some methods concentrated more on the customers' expectations and perceptions, while others emphasized only the perceptions of the customers. Other models concentrated on the satisfaction level of the customer or were more technology based. In this section a brief description of each model found will be given. It has been decided to group the models according to their specific emphasis. The models will be spilt into the categories of Expectation and Perception based Models; Perception Based Models; Consumer

Satisfaction Based Models; Technology Based Models as well as Models based on other theories. Further clarification and diagrams of all the models discussed, can be found in Appendix A. It must be noted that some models may apply to more than one category; therefore some models were placed into the category thought to be most applicable.

2.2.3.1 Expectation and Perception Based Models

The models described in this section measure service quality through the use of customers' expectations and perceptions.

The first model which utilises expectations and perceptions as a base is the **GAP Model**. This model was developed by Parasuraman, Ziethaml and Berry in 1984. The model Parasuraman *et al.* (1985) stated that service quality is a function of the differences between expectations and perceptions along the quality dimensions. The gap analysis forms the foundation for this model of service quality. The five gaps that make up the model are:

- Gap 1: The difference between customer expectations and management's perceptions of those expectations.
- Gap 2: The difference between management's perceptions of customer's expectations and service quality requirements.
- Gap 3: The difference between service quality specifications and actual delivered service.
- Gap 4: The difference between service delivery and communication to customers about service delivery.
- Gap 5: The difference between customers' expectations and perceptions about the service delivered. The "size" of this gap is dependent on the magnitude and direction of the four gaps described above.

Therefore from the above definitions it can be noted that service quality is a function of perceptions and expectations and therefore can be calculated by using equation 1.

$$SQ = \sum_{j=1}^k (P_{ij} - E_{ij}) \quad (\text{Parasuraman } et al., 1985) \quad (1)$$

It must be noted that the formula shown above in particular represents the gap between the customers expected service and perceived service (Gap 5), where:

SQ = Overall service quality;

k = Number of attributes.

P_{ij} = Performance perception of stimulus i with respect to attribute j .

E_{ij} = Service quality expectation for attribute j that is the relevant norm for stimulus i .

After further research and refinement the model was called SERVQUAL and was used for measuring customers' perceptions. (Parasuraman *et al.*, 1988) At this point the original 10 dimensions of service quality were condensed into five dimensions: reliability, responsiveness, tangibles, assurance and empathy. The development of these five dimensions will be explored in more detail later in this chapter.

The second model to adopt expectations and perceptions to measure service quality is referred to as the **Attribute Service Quality Model** and was developed by Haywood-Farmer in 1988. In this model it is stated that a service firm will have a "high quality" level if it consistently meets the customer's perceptions and expectations. The development of this service model is dependent on the separation of various service dimensions into groups. These attributes consist of physical facilities and processes as well as of people's behaviour and professional judgement.

The final model to make use of expectations and perceptions is called the **Internal Service Quality Model** and was developed by Frost and Kumar in 2000. This model is based on the concept of the GAP model established by Parasuraman *et al.* (1985). The model analysed the dimensions and the relationships which determine service quality between front-line staff and support staff, within a large service firm.

2.2.3.2 Perception Based Models

In this section the models which use perceptions to measure service quality will be introduced in historical order.

Grönroos developed the first model to use perceptions to measure service quality. This model is referred to as the **Technical and Function Model**. This model requires an understanding of a customer's perceptions of quality and the factors influencing service quality which are needed for a firm to compete successfully in industry. Expected service and perceived service must be monitored by a firm in order to attain customer satisfaction. As a result Grönroos (1984) pinpoints three components of service: technical quality, functional quality and image.

Technical quality is the quality of what the customer actually receives. The customer's interaction with the company is important as it allows him/her to assess the quality of the service. Functional quality refers to how the customer is given the technical result. This has an impact on how the customer views the service received. Image is built up mainly from technical and functional quality. Other factors influencing image are word of mouth, pricing and public relations. Image plays a vital role for firms in the service industry.

The next model to use perceptions was generated by Brogowicz, Delene and Lyth in 1990, and is referred to as the **Synthesised Model of Service Quality**. This model states that potential customer perceptions need to be incorporated or included with actual customer perceptions in the service quality model. Potential customers have not experienced the service but learned of the service through word of mouth, advertising and other media communications. In this model an attempt is made to integrate the traditional managerial framework; service design, operations and marketing activities. The purpose of this model is to identify the dimensions associated with the service quality in the traditional managerial framework of planning, implementation and control.

The model developed by Cronin and Taylor was the next to follow. This model was developed in 1992 and called the **Performance Only Model**. This model investigated the theory and measurement of service quality and its relationship with customer satisfaction and purchase intentions. A comparison of calculated difference scores using only perception scores was completed, and as a result it was concluded that perceptions are better predictors of service quality.

A performance only measurement of service quality was developed and named SERVPERF. The authors believe that service quality is made up of customer attitude and that performance is the only measure for determining service quality. Cronin and Taylor argued that SERVQUAL does not distinguish clearly between satisfaction and attitude.

As a result, service quality is calculated on the basis of perceptions. This, therefore, can be represented in the following formula:

$$SQ = \sum_{j=1}^k P_{ij} \quad (\text{Cronin } et \text{ al.}, 1992) \quad (2)$$

Where:

SQ = overall service quality;

k = number of dimensions

P_{ij} = Performance perception of stimulus i with respect to attribute j .

Further research undertaken and developments achieved on the topic of the Performance Only Model will be presented and discussed later in the literature.

The next model was developed by Teas in 1993, and is split into two parts. The first part is the **Evaluated Performance Model**; the second is the **Normed Quality Model**. Teas (1993, p. 22) cites Monroe and Krishnan (1985, p.212) and affirms that the definition of perceived product quality is the “perceived ability of a product to provide satisfaction ‘relative’ to available attributes.” Teas (1993) uses this definition as a basis and the assumption that “the perceived ability of the product (defined as goods or a service) to deliver satisfaction can be conceptualised as the product’s relative congruence with the consumer’s ideal product features. For a more detailed breakdown of the assumptions and formulas used in these models refer to Appendix B.

In 1996, researchers Spreng and Mackoy developed the **Model of Perceived Service Quality and Satisfaction**. In this model Spreng and Mackoy attempted to improve the understanding between perceived service quality and customer satisfaction. This model is a modification of

Oliver's (1993) model. The model emphasizes the effect of expectations, perceived performance desires, desired congruency and expectation disconfirmation on the overall service quality and customer satisfaction.

The next model, the **Retail Service Quality and Perceived Value Model** was developed by Sweeney, Soutar and Johnson in 1997. Through the use of two alternate models the value and willingness to purchase a specific service encounter and how it is affected by service quality was investigated. Value can be defined as a comparison between what consumers get and what they give, suggesting that value is a comparison of benefits and sacrifices (Zeithaml *et al.*, 1988). Therefore in this model the value construct used is that of "value for money".

Model 1 emphasises that over and above product quality and price perceptions, functional service quality and technical service quality are also factors that affect value perceptions. Model 2 highlights that functional service quality does not only directly influence a consumer's willingness to buy but also affects the technical service quality perceptions. This in turn influences product quality perceptions. However, neither of the two directly affects value perceptions.

The last model to make use of customer perceptions to measure service quality is the **Service Quality, Customer Value and Customer Satisfaction Model**. This was developed by Oh in 1999. This model proposes an integrative idea of service quality, customer care and customer satisfaction. Focus is placed mainly on the post purchase decision process. Important factors such as perceptions, service quality, consumer satisfaction, customer value and intentions to purchase, are all included in the model. The model provides evidence that the customer value plays a vital role in the customer's post-purchase decision making process. These factors come prior to customer satisfaction and repurchase targets. Results also reveal that perceived price has a contrary influence on perceived customer value and no relationship with perceived service quality.

2.2.3.3 Satisfaction Based Models

This section introduces and discusses models which use customer satisfaction or any form of satisfaction process to measure service quality.

In 1992, Mattsson developed the model **Ideal Value Model of Service Quality** to measure service quality. In this model of service quality a value approach is adopted and it is thought that service quality should be modelled as an outcome of the satisfaction process. The value-based model of service quality suggests the use of a perceived ideal against which the experience of service is compared.

The model developed by researchers Spreng and Mackoy in 1996 can be found in both the Perceptions based and Satisfaction based models. In this model Spreng and Mackoy attempted to improve the understanding between the perceived service quality and customer satisfaction. This model is a modification of Oliver's (1993) model. The model emphasizes the effect of expectations, perceived performance desires, desired congruency and expectation invalidation on the overall service quality and customer satisfaction. This model, developed by Spreng and Mackoy, also fits the group of the Satisfaction based models as it uses both satisfaction and perceptions to measure service quality.

The next model is referred to as the **PCP (Pivotal, Core, Peripheral) Attribute Model** and was developed by Philip and Hazlett in 1997. This model takes the shape of a hierarchical structure and is based on three main classes of characteristics. These include: the pivotal, core and peripheral characteristics. According to the model each service is made up of three overlapping areas where the large majority of the dimensions and concepts have all been used to define service quality. The three levels are defined as follows: the pivotal region is the output i.e. the service delivered (outcome of the service experience) while the core and peripheral regions make up the inputs and processes, the manner in which the service is delivered.

First time customers view the pivotal attributes as most important but as their service encounters become more frequent, the core and peripheral attributes gain more importance.

The two models to follow are currently being used in the South African motor industry to measure customer satisfaction. The two models are the **J.D. Power and Associates South African Customer Satisfaction Index (CSI) StudySM** developed and used by J.D. Power and Associates and the **Synovate Quality Awards** carried out with their **Competitive Customer Satisfaction Index (CCSI)**. The CSI study works on 1000 point scale and is made up of four component weightings. These weightings include Vehicle Quality and Reliability; Vehicle Appeal; Ownership Costs and Service Satisfaction. The CCSI study has two awards, the first being the Sales and Service Satisfaction Award, the second being the Product Quality Award. The CCSI is measured across all vehicle categories. The Sales and Service Award will receive more attention during this research. It is made up of three categories Sales CSI, Service CSI and Product Quality. These categories and other details for both the CSI study and the CCSI will be discussed in more detail later in the literature.

2.2.3.4 Technology Based Models

These models, which have been developed more recently, make use of information technology to measure service quality. From the research undertaken on these models it was found that most models were used in the banking sector and that these are not appropriate to this study. A description of each of the models can be found in Appendix A.

2.2.3.5 Other Service Quality Models

In this section models which do not make use of expectations or perceptions or any form of satisfaction process are discussed.

The first model is that developed by Dabholkar, Sheperd and Thorpe in 2000. The model is called the **Antecedents and Mediator Model**. In Figure 2.2, below, a complete model of service quality is shown. This includes an analysis of its antecedents, consequences and mediators to provide a clearer understanding of conceptual issues related to service quality. These basic issues include the relevant factors related to service quality, better understood as components or prior factors and the relationship of customer satisfaction with behavioural intentions.

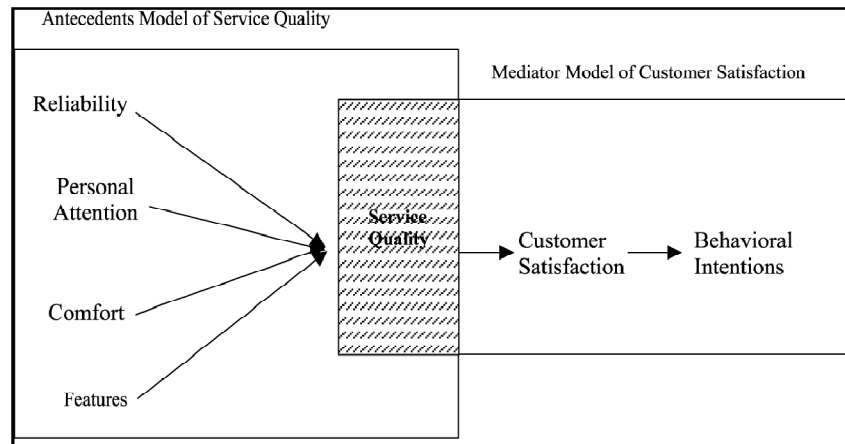


Figure 2.2: Antecedents and Mediator Model, (Dabholkar *et al.*, 2000)

The second model is the **Internal Service Quality DEA Model** developed by Soteriou and Stavrinides, also in 2000. This model focuses on service quality in varying branches of the banking sector, and it provides banks with directions about how to optimize and utilize their resources correctly. The purpose of this model is not to develop service quality measures but to provide guidelines of how such measures can be implemented to improve service quality. The model focuses on pointing out which resources are not being utilized correctly. Consumable resources and account structure form the two inputs of the system. The service quality level as seen by personnel at the branch makes up the output. The data envelope analysis (DEA) compares branches and how well they convert their inputs into outputs. The DEA model has the advantage of pinpointing the under-performers as well as suggesting ways of improving.

2.2.3.6 Models Overview

Of the various models reviewed in the literature survey, the categories found to be most relevant to this research were those which were based on customer expectations and perceptions, perceptions only and satisfaction. Technology and other based models were found to be more applicable to other service based industries. In order, to achieve the objectives of this research the models based on customer expectations and perceptions and perceptions only would be the two categories of models to be used. In particular the SERVQUAL and SERVPERF models are relevant. These will be compared to the satisfaction based models used currently in the South African motor industry. A background of the SERVQUAL and SERVPERF models will be

supplied in the next section and a more detailed breakdown of how each model is formed will be presented.

2.3 The “GAP” Model of Service Quality

The importance of delivering superior service quality and meeting and/or exceeding customers' expectations now plays a vital role for firms who wish to achieve an advantage in today's increasingly competitive business environment. Providing superior service quality is important but it is not sufficient. For firms to truly understand service quality one must monitor customer perceptions of service quality, identify the causes of service-quality shortfalls and finally take the necessary action to improve the quality of service. (Ziethaml *et al.*, 2006)

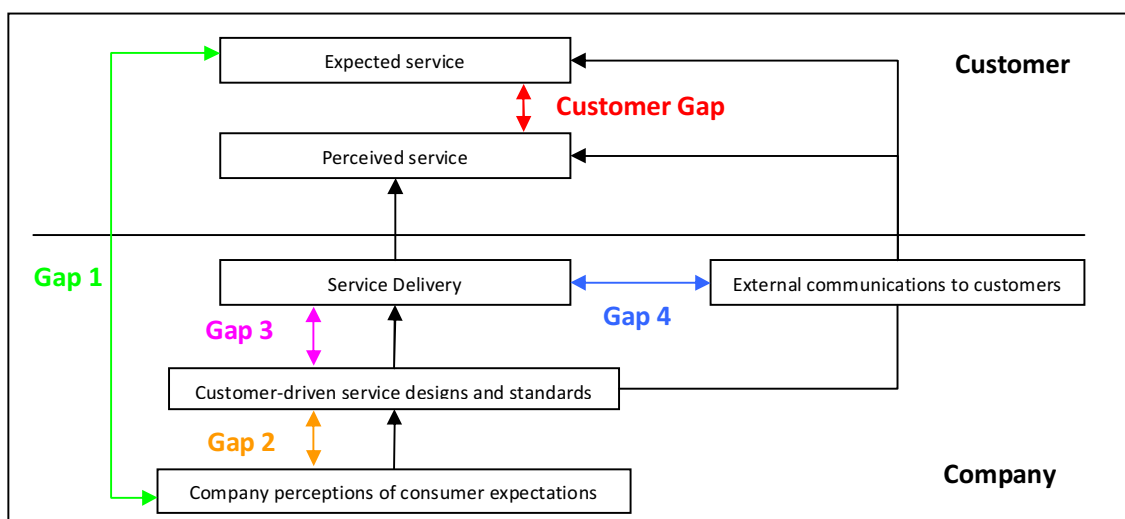


Figure 2.3: The ‘Gap’ Model of Service Quality (Ziethaml *et al.*, 2006)

The “GAP Model”, as seen in Figure 2.3, of service quality allows one to understand what factors contribute to poor service-quality perceptions. These gaps exist within the firm which is providing the service. As seen earlier, Parasuraman *et al.* (1990, p 37) showed that there are five “gaps” which make up the model. These five “gaps” are:

- Not Knowing What Customers Expect (Gap 1)
- Not Having the Right Service Quality Designs and Standards (Gap 2)
- Not Delivering to Service Designs and Standards (Gap 3)
- Not Matching Performance to Promise (Gap 4)

- The Customer Gap (Gap 5)

- **Gap 1: Not Knowing What Customers Expect**

Gap 1 refers to the difference between customer expectations of service and a company's understanding of those expectations. A primary cause for not meeting customer expectations is that the firm lacks an accurate understanding of exactly what those expectations are. (Ziethaml *et al.*, 2006)

One of the factors which is responsible for or leads to Gap 1 is **inadequate marketing research orientation**. This occurs when the management or the employees of a firm do not collect accurate information about the clients' expectations. Market research is used to create or capture relevant information about customer expectations. This includes techniques such as customer interviews, survey research and complaint systems. The next factor affecting this gap is the **lack of upward communication** in a firm. This occurs when management does not communicate with frontline employees (who often know a great deal about customers). This is due to the fact that there are too many layers between contact personnel and top management.

The next factor influencing Gap 1 is **insufficient relationship focus**. This occurs when a firm lacks a strategy to retain customers and strengthen its relationship with them. This can be seen when a firm primarily focuses on the transaction rather than on their relationship with the customer or client. Another example is seen when firms choose to focus on new customers; as a result they fail to understand the changing needs and expectations of their existing customers. The final factor associated with Gap 1 is an **inadequate service recovery**. This takes place when a firm fails to show interest in customer complaints.

- **Gap 2: Not Having the Right Service Quality Designs and Standards**

Gap 2 is the difference between a firm's understanding of customer expectations and the development of customer-driven service design and standards. In order for a firm to deliver superior service quality an accurate perception of customers' expectations is required. Another

necessity is the presence of service designs and performance standards that reflect these accurate perceptions. (Ziethaml *et al.*, 2006)

The first factor which influences Gap 2 is **poor service design**. This is most apparent in a firm where there are no standards against which customer contact personnel can be evaluated and/or compensated. When these standards are present this allows management to prioritise which types of performance measures are important and therefore reflect customer expectations and the quality of service as perceived by the customer. The next factor which affects Gap 2 is the **absence of customer-driven standards**. This occurs when process management does not focus enough on customer requirements. At the same time there is no formal process for setting service quality goals. **Inappropriate physical evidence and servicescape** is the final factor which affects this gap. Servicescape refers to the physical surroundings where the service is being delivered. This gap occurs when a firm fails to develop tangibles (This refers to the appearance of physical facilities, equipment, personnel, and communication materials) in line with customer expectations. Gap 2 is made worse by servicescape designs that do not meet customer and employee needs.

▪ **Gap 3: Not Delivering to Service Designs and Standards**

Gap 3 deals with the difference or discrepancy between the development of customer driven service standards and actual service performance by company employees. Factors which affect or lead to the widening of Gap 3 are deficiencies in human resource policies; customers who do not fulfil their roles; problems with service intermediates and failure to match supply and demand. (Ziethaml *et al.*, 2006)

Deficiencies in human resource policies occur when employees in the firm do not understand the role they play in the company. As a result, there are employees who clash with customers and firm management. At the same time there is a lack of team work present and there are inappropriate evaluation and compensation systems in place, which add to these deficiencies. The next factor which influences this gap is the **customer**. Even if the service delivery of the contact employees remains constant the customer and his/her attitude add variability to the service delivery. This can occur when a customer has a lack of knowledge of the product or

service he/she is using. This, as a result, takes up more of the service provider's time and in turn impacts negatively on other customers.

The **challenge of delivering a service through intermediaries'** (retailers, franchisees, agents and brokers) is the next factor that affects Gap 3. The reason for this is that it is difficult to control the quality and consistency of a service when it is being provided by various intermediaries. The final factor is **the synchronising of supply and demand**. Companies that offer a service and cannot inventory their services, therefore, have the problem of either 'overdemand' or 'underdemand'. The case of 'underdemand', results in companies losing sales as their capacity cannot handle the demand. This, therefore, increases Gap 3.

▪ **Gap 4: Not Matching Performance to Promise**

Gap 4 highlights the difference between service delivery and the service provider's external communications. The promises a firm makes through its advertising and its sales force may raise the expectations of customers of that firm's service quality. This being said, there are four factors which affect Gap 4. These include a lack of integrated service marketing communications, ineffective management of customer expectations, overpromising and inadequate horizontal communication. (Ziethaml *et al.*, 2006)

A lack of integrated services marketing communications occurs when there is an absence of interactive marketing (the marketing between contact employees and customers) in the communications plan of the firm. The lack of an internal marketing program influences this factor. This is, in turn, due to the fact that employees are not educated about service delivery and therefore are likely to either exaggerate promises or fail to communicate aspects of the service to the customer correctly. The **ineffective management of customer expectations** is present when there is an absence of customer expectation management through all forms of communication. This results in having a customer base that is inadequately educated. The final factor is **inadequate horizontal communications**. This occurs when there is ineffective communication between sales and operations as well as advertising and operations.

- **Gap 5: The Customer Gap**

The Customer Gap is the difference between a customer's expectations and perceptions. Customer expectations are standards or points of reference which the customer brings into the service experience. Perceptions are assessments made by the customers of the actual service experience. The expectations of a customer include what a customer believes should or will happen. Closing this gap (the difference between customer expectations and perceptions) is critical to delivering quality service. It forms the foundation to the gap model. In order to close the Customer Gap the four other gaps (Gaps 1 – 4 previously discussed) need to be closed first. The Customer Gap is known as SERVQUAL, as this measures the difference between customer's expectations and perceptions. (Ziethaml *et al.*, 2006)

2.4 SERVQUAL

2.4.1 Background to SERVQUAL

SERVQUAL is developed from quantitative research which was undertaken to create a tool for measuring customers' perceptions of service quality by Parasuraman *et al.* (1990, p 23). To ensure the model was valid and reliable, customers from five different service sectors were asked to participate in surveys. These sectors included: product repair and maintenance, retail banking, long-distance telephone services, securities brokerages and credit card services.

A 97 question instrument was designed from the quantitative and exploratory research. The 97 questions captured the 10 dimensions listed in Table 2.1. One question was used to measure the customer's expectation while the other measured his/her perception about the specific company whose service quality was being assessed. A seven-point scale, which ranged from 1 (Strongly Disagree) to 7 (Strongly Agree), was used in each question.

The 97 question survey was then tested on a sample of 200 customers, equally divided between males and females. After a further refinement 190 customers from four independent samples were interviewed. This was undertaken in order to verify the reliability and validity of the questionnaire. After further refinement the final questionnaire consisted of 22 questions. Each of the latter dealt with expectations and perceptions and covered five dimensions of service

quality. These five dimensions were: Tangibles, Reliability, Responsiveness, Assurance and Empathy. In the Table 2.2 the relationship between the ten original dimensions and the five SERVQUAL dimensions can be observed.

**Table 2.2: Tie between Five SERVQUAL Dimensions and Ten Original Dimensions
(Parasuraman *et al.*, 1990, p 25)**

		SERVQUAL Dimensions				
		Tangibles	Reliability	Responsiveness	Assurance	Empathy
Original Dimensions	Tangibles					
	Reliability					
	Responsiveness					
	Competence					
	Courtesy					
	Credibility					
	Security					
	Access					
	Communication					
	Understanding the Customer					

From Table 2.2 it can be seen that even though SERVQUAL only has five dimensions, it has components associated with all ten original dimensions. The definitions given to the five SERVQUAL dimensions are listed below (Parasuraman *et al.*, 1990, p 26):

- Tangibles: “Appearance of physical facilities, equipment, personnel, and communications materials.”
- Reliability: “Ability to perform the promised service dependably and accurately.”
- Responsiveness: “Willingness to help customers and provide prompt service.”
- Assurance: “Knowledge and courtesy of employees and their ability to convey trust and confidence.”
- Empathy: “Caring, individualised attention the firm provides its customers.”

2.4.2 SERVQUAL Dimensions

Parasuraman *et al.* (1990, p 26-27) declare that the five SERVQUAL dimensions represent the central principles that customers use to evaluate service quality. Therefore interviewees may believe all five dimensions are equally important. To see whether this was true or not

Parasuraman *et al.* (1990) performed a further investigation on the importance of the five SERVQUAL dimensions, in four service industry sectors. These sectors included Credit Card Customers; Repair and Maintenance Customers; Long Distance Telephone Customers and Bank Customers. Results from this study are illustrated in Table 2.3.

Table 2.3: Results from studies (Parasuraman *et al.*, 1990)

	Mean Importance Rating on 10-point Scale	Percentage of Respondents Indicating which Dimension is Most Important		Mean Importance Rating on 10-point Scale	Percentage of Respondents Indicating which Dimension is Most Important
Credit Card Customers (n = 187)			Long-Distance Telephone Customers (n = 184)		
Tangibles	7.43	0.6	Tangibles	7.14	0.6
Reliability	9.45	48.6	Reliability	9.67	60.6
Responsiveness	9.37	19.8	Responsiveness	9.57	16.0
Assurance	9.25	17.5	Assurance	9.29	12.6
Empathy	9.09	13.6	Empathy	9.25	10.3
Repair-and-Maintenance Customers (n = 183)			Bank Customers (n = 177)		
Tangibles	8.48	1.2	Tangibles	8.56	1.1
Reliability	9.64	57.2	Reliability	9.44	42.1
Responsiveness	9.54	19.9	Responsiveness	9.34	18.0
Assurance	9.62	12.0	Assurance	9.18	13.6
Empathy	9.30	9.6	Empathy	9.30	25.1

The results showed that reliability, responsiveness, assurance and empathy all scored above 9 on a 10-point scale where 1 is 'not at all important' and 10 is 'extremely important'. Tangibles were only rated between 7.14 and 8.56. At the same time participants were asked to indicate which dimension was most important in their evaluation of service quality. The results showed that respondents felt reliability was the most important dimension (ranging from 42.1% to 60.6%) and tangibles the least (ranging from 0.6% to 1.2%). These results occurred regardless of which industry was being investigated. However, the results that will be focussed upon and discussed during this research are those of the Customers in the Repair-and-Maintenance category.

- **Putting it all Together**

In Figure 2.3 a link between the five gaps can be seen. It must be stressed that the key to closing Gap 5 (The Customer Gap) is to close Gaps 1 to 4. The gap model of service quality serves as a framework for service firms who are looking to improve service quality and service marketing.

In the motor dealerships to be analysed, during this research, the Customer Gap (Gap 5) will be highlighted through the use of SERVQUAL. This will allow the measurement of and as a result supply an understanding of the expectations and perceptions of the various customers for the dealerships. In addition to this, the frontline employees of each dealership will also be interviewed. This will allow one to consider an analysis of Gap 1 within each dealership and whether or not this gap can aid the improvement of service quality.

2.4.3 Past Research and Applications of SERVQUAL

Asubonteng *et al.* (1996) reviewed the definition and measurement of service quality. At the same time, the reliability and validity of SERVQUAL measures was undertaken. In Appendix C, Tables C1 to C5, show a comparison of other SERVQUAL replication studies with that of Parasuraman *et al.* (1985, 1988). Together with their associated reliabilities and validities the findings and results from past research and the applications of SERVQUAL will set benchmarks for this research.

Conclusions from Past Applications

Asubonteng *et al.* (1996) provided a comparison of eighteen past applications of SERVQUAL (including Parasuraman *et al.* (1985; 1988)) performed in various service industries. These industries ranged from telephone companies to insurance companies from banks to hospitals and retail chains. This indicates that SERVQUAL can be used in many different service industries. Sample sizes for these applications ranged from 58 to 775. The applications used a similar questionnaire format to that of Parasuraman *et al.* (1988). Most of the re-applications of SERVQUAL studied had no major word changes. Those that did have changes, either changed

the language or altered words to suit the industry in which the research was being performed. The majority of the re-applications all kept to the original 22 items of SERVQUAL. The majority of the re-applications of SERVQUAL also kept the seven-point response scale while others selected the five-point response scale. Twelve out of the eighteen authors chose to mail their surveys; three used personal interviews; two allowed participants to self-administer their surveys and only one used a telephone interview. Most authors used the five dimensional structure of Parasuraman *et al.* (1988) as the basis for the initial number of factors extracted. When it came down to the number of final dimensions used there was no clear selection as numbers varied from five dimensions to twelve dimensions. It must be noted that the definition of dimensions in the research by Asubonteng *et al.* (1996) is the same as previously stated, but what was found was that some studies or researchers were using more than the basic five dimensions of Parasuraman *et al.* (1988) while others were using fewer.

Cronbach's alpha is used to calculate reliability co-efficients. These values vary from 0.43 to 0.99 with a mean value of 0.81. The majority of the authors did not apply a validity test but those who did used the convergence validity test. Overall the findings from the study and comparison performed by Asubonteng *et al.* (1996) provided support for the reliability and the face validity of SERVQUAL scores on a five dimensional scale.

2.5 SERVPERF

2.5.1 Background

SERVPERF has been developed by Cronin and Taylor. Both researchers feel that the SERVQUAL model developed by Parasuraman *et al.* (1985) is an inadequate way for measuring service quality. The reason for this being that the SERVQUAL model is based on the Gap Theory and the difference between customers' expectations and perceptions in a general class of service providers. This difference then translates into service quality. There is, however, little or no theoretical or empirical evidence to support the fact that the gap between expectations and performance of a firm is the foundation for measuring service quality (Carmen 1990). As a result Cronin and Taylor developed a performance-only scale for measuring service quality:

$$SQ = \sum_{j=1}^k (P_{ij}) \quad (\text{Cronin } et al., 1992) \quad (3)$$

In equation 3 the perception scores assigned by the interviewees are summed together and divided by the number of questions making up the dimension. The five scores of each dimension are then added together to provide one with a service quality score based only on the performance of the service received. Just as with SERVQUAL an un-weighted and weighted score for SERVPERF exists. To calculate the weighted SERVPERF score one takes the weighting assigned to each dimension, divides it by 100 and multiplies it against the average of the dimension score.

2.5.2 Past Research of SERVPERF

Cronin and Taylor (1992) performed a study of SERVQUAL versus SERVPERF. They compared SERVQUAL and weighted SERVQUAL scores to SERVPERF and weighted SERVPERF scores. In the study, the first step taken was to examine the dimensionality, reliability and validity of the service quality models under investigation. The second was to compare the alternative models used to measure service quality. The third and final step was to analyse the relationship between service quality, consumer satisfaction and purchase intention. The sample for this study was 660 questionnaires in four different service industries: Banking, Fast Foods, Pest Control and Dry Cleaning.

Results from the study of dimensionality, reliability and validity found that both SERVQUAL and SERVPERF models could be treated as uni-dimensional as the reliability co-efficient, alpha, exceeded 0,8. With regard to validity a high correlation between the models SERVPERF, importance-weighted SERVPERF and service quality indicated some degree of convergent validity. Convergent validity involves the extent to which a measure correlates when measuring the same construct. The discriminant validity of the research variables (SERVPERF, weighted SERVPERF and service quality) as the three service quality scales all correlate more highly with one another in comparison with the other research variables (SERVQUAL, weighted SERVQUAL). As a result, Cronin and Taylor found that the proposed performance-based measures provide a

more construct-valid explanation of service quality due to their context validity and the evidence of their discriminant validity.

Results from the second study of the comparison of the alternative measures of service quality between SERVQUAL, weighted SERVQUAL, SERVPERF and weighted SERVPERF showed that both the un-weighted SERVQUAL and un-weighted SERVPERF models were the best models of the two alternative conceptualisations of service quality. Therefore, the two models would be used in the structural analysis of the relationship between these scales, service quality, customer satisfaction and purchase intentions (the third study).

In the final study only the SERVPERF scales were used to assess the strength of the relationship between service quality, consumer satisfaction and purchase intention. The decision to use only the SERVPERF scale was made on the basis that when assessing whether the two respective models fit the data, SERVQUAL had a good fit in two of the four industries studied (banking and fast foods) while SERVPERF had an excellent fit in all four industries.

The chief conclusion of Cronin and Taylor's study was that the SERVPERF model is a superior model for measuring service quality when compared to SERVQUAL. Therefore, in this research the SERVPERF model will also be used to measure service quality across the various dealerships. This will allow one to decide if the findings from the Cronin and Taylor research can be replicated.

2.5.3 Criterion for Choosing a Service Quality Model

From the above discussion it can be seen that there are various service quality models all of which measure service quality using distinct techniques. Some models found that measuring service quality with customers' expectations and perceptions is best while others felt that only the use of perceptions was better. An important point which must be made is that from the above investigation it is clear that there is no well-accepted conceptual definition and model of service quality nor is there any generally accepted operational definition of how to measure service quality. Therefore, in this research various models will be used to measure service

quality and the variations in the measurement will then be evaluated. This will be done in an attempt to cover both approaches i.e. the measurement of both expectations and perceptions.

The SERVQUAL model or GAP Model by Parasuraman *et al.* (1985) is utilized to measure customer's expectations and perceptions. The Performance Only Model or SERVPERF developed by Cronin and Taylor in 1992 will be used to measure customers' perceptions. These two models have been selected as many other models used either SERVQUAL or SERVPERF as a basis from which to develop other models.

2.6 Customer Satisfaction Measurement

2.6.1 Introduction

The third set of models used to measure service quality are based on satisfaction. A more detailed description of the satisfaction based models used in the South African Motor Industry is now discussed and defined. In the South African motor industry there are currently two methods being used to measure customer satisfaction. The first is the South African Customer Satisfaction Index (CSI) StudySM performed by J.D. Power and Associates; the other being the Competitive Customer Satisfaction Index (CCSI) undertaken by Synovate and its Quality Awards. A brief description of both methods used in the South African market follows below.

2.6.2 Customer Satisfaction Index (CSI) StudySM

The J.D. Power and Associates South African Customer Satisfaction Index (CSI) StudySM is performed throughout the year and the results for each year are released the following year. The study covers all manufacturers and splits the results into the various segments. The CSI study investigates satisfaction of the customer with respect to dealer maintenance and service repairs. In the study customers assess the service department of the dealership, the warranty experience, the service process as well as maintenance and repair problems.

The CSI Study is based on a 1000-point scale and made up of four component weightings. These weightings include (J. D. Power and Associates, 2009):

- Vehicle Quality and Reliability (32%)

This includes any problems experienced with the vehicle since the customer has taken delivery.

- Vehicle Appeal (29%)

This includes satisfaction with the vehicle's performance, design, function and styling.

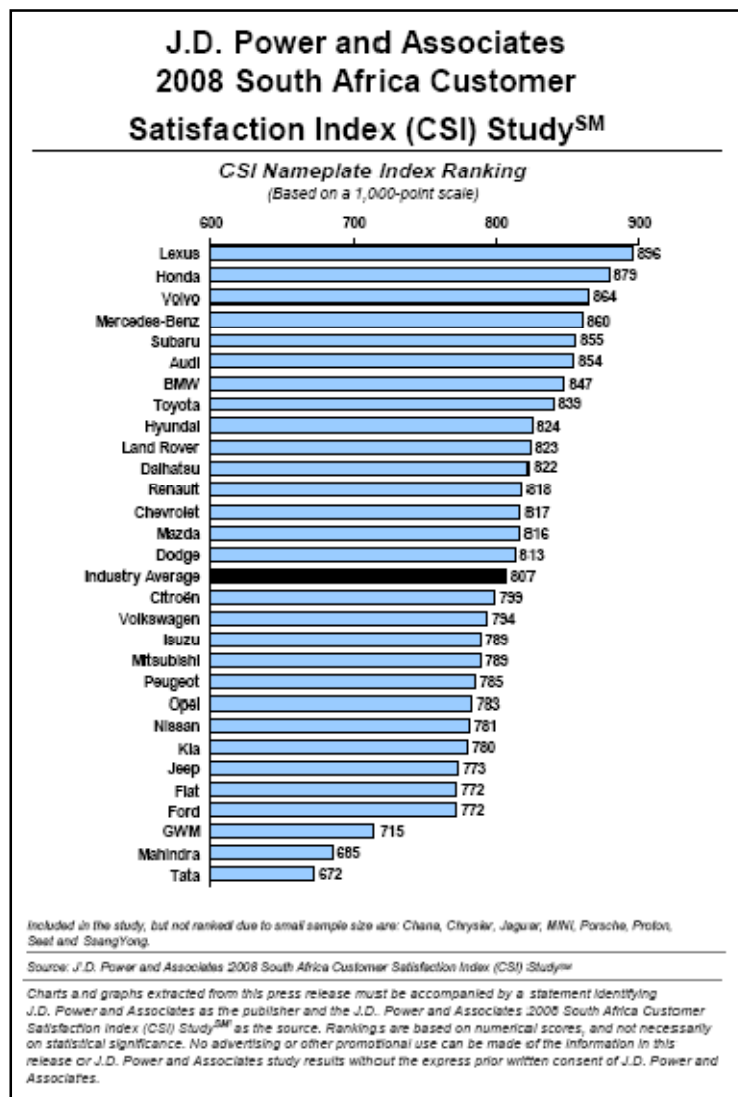
- Ownership Costs (20%)

Insurance, fuel consumption and the cost of service and repairs fall into this category.

- Service Satisfaction (19%)

This refers to details of the service experience such as service initiation, the service advisor, the facilities of the dealership, vehicle pick-up and service quality.

This study has been applied for five years. Customers who have owned their vehicle from between 10 and 21 months are interviewed. These interviews cover 77 attributes, which fall into the four component weightings listed above. These importance weightings are generated from the survey responses of the vehicle owners themselves, therefore reflecting what is most relevant to motorists in South Africa. Results from the 2007 study can be seen in Figure 2.4. A sample size of around 12 100 new vehicle owners who registered between October of 2006 and September of 2007 were used for the 2008 study (J.D. Powers and Associates, 2009).



**Figure 2.4: J.D. Power and Associates Customer Satisfaction Index (CSI) Study Results 2007
(J.D. Powers and Associates, 2009)**

2.6.3 Competitive Customer Satisfaction Index (CCSI)

The Synovate Quality Awards are undertaken through its Competitive Customer Satisfaction Index (CCSI). It is a study which covers the main vehicle manufacturers in South Africa. These include Daimler Chrysler South Africa, Ford Motor Company South Africa, BMW, Toyota, Nissan, Volkswagen South Africa, Fiat, Honda, Renault, PAG and General Motors South Africa. In 2002 the results from the Synovate Quality awards were made public. (Synovate, 2008)

The awards are presented to manufacturers twice a year. The Sales and Service Satisfaction awards are presented in March while the Product Quality awards are presented in October of each year. The Sales and Service Awards are split into four categories:

- Customer Satisfaction when purchasing a Passenger Vehicle
- Customer Satisfaction when servicing a Passenger Vehicle
- Customer Satisfaction when purchasing a Light Commercial Vehicle
- Customer Satisfaction when servicing a Light Commercial Vehicle

The various categories and segments for the Product Quality Awards can be seen in the Table 2.4.

Table 2.4: Synovate's categories & segments for the Product Quality Awards (Synovate, 2008)

Passenger Vehicles	Light Commercial Vehicles
Entry	Half ton
Small Hatch	Small Petrol Single Cab
Small Sedan	Large Petrol Single Cab
Top Hatch	Diesel Single Cab
Top Sedan	Petrol Double Cab
Medium	Diesel Double Cab
Top Executive	
Sports Coupé	Category Awards
MPV / Station Wagon	Best Local Plant Manufacturing Passenger Cars
	Best Volume Passenger Car Overall
Recreational Vehicles	Best Luxury Passenger Car Brand Overall
Small RV	Best Local Plant manufacturing Light Commercial Vehicles
Large RV	Best One Ton Diesel Light Commercial Vehicle Overall
	Best One Ton Petrol Light Commercial Vehicle Overall
	Best Overall Light Commercial Vehicle Brand

The study of customer satisfaction and the various aspects associated with ownership, was initiated by Synovate in 1991, where 55 000 car owners were interviewed.

The CCSI provides a detailed look at customer perceptions with regard to the entire vehicle ownership experience. This includes both the purchasing and the servicing experience. At the

same time the link between the customer and the brand is investigated. This provides the manufacturers with an insight into marketing and positioning strategies. Currently the CCSI collects data from more than 45 500 customers on an annual basis. These results are published quarterly.

The survey has three main components or elements (Synovate, 2008):

- Sales CSI
The Sale CSI looks at the general impression created by the brand, the sales person, pricing, financing offered and availability. At the same time the hand-over and post-sale experience is examined.
- Service CSI
The Service CSI looks at the appearance created by the manufacturer, telephone and reception staff, quality of service staff and attitude, pricing and invoicing, vehicle collection and the post-service experience.
- Product Quality (PP100)
The PP100 (Problems per 100 vehicles) is a “zero defects” type measurement of vehicle quality.

When interviewed customers are asked whether or not they have experienced any problems in each of the following categories (Synovate, 2008):

- Noise Levels
“Wind noise, squeaks and rattles and road noise”
- Static Functional Aspects
“Water leaks, dust leaks, ventilation system and functional problems”
- Dynamic Functional Aspects
“Steering and handling, gearbox, brakes and handbrake, mechanical and performance, suspension and drive shaft”
- Appearance
“Seats and their covering, interior, exterior paint, exterior bodywork and mouldings”

Figure 2.5 shows the results from the Synovate Quality Awards for 2007 for the Service CSI.

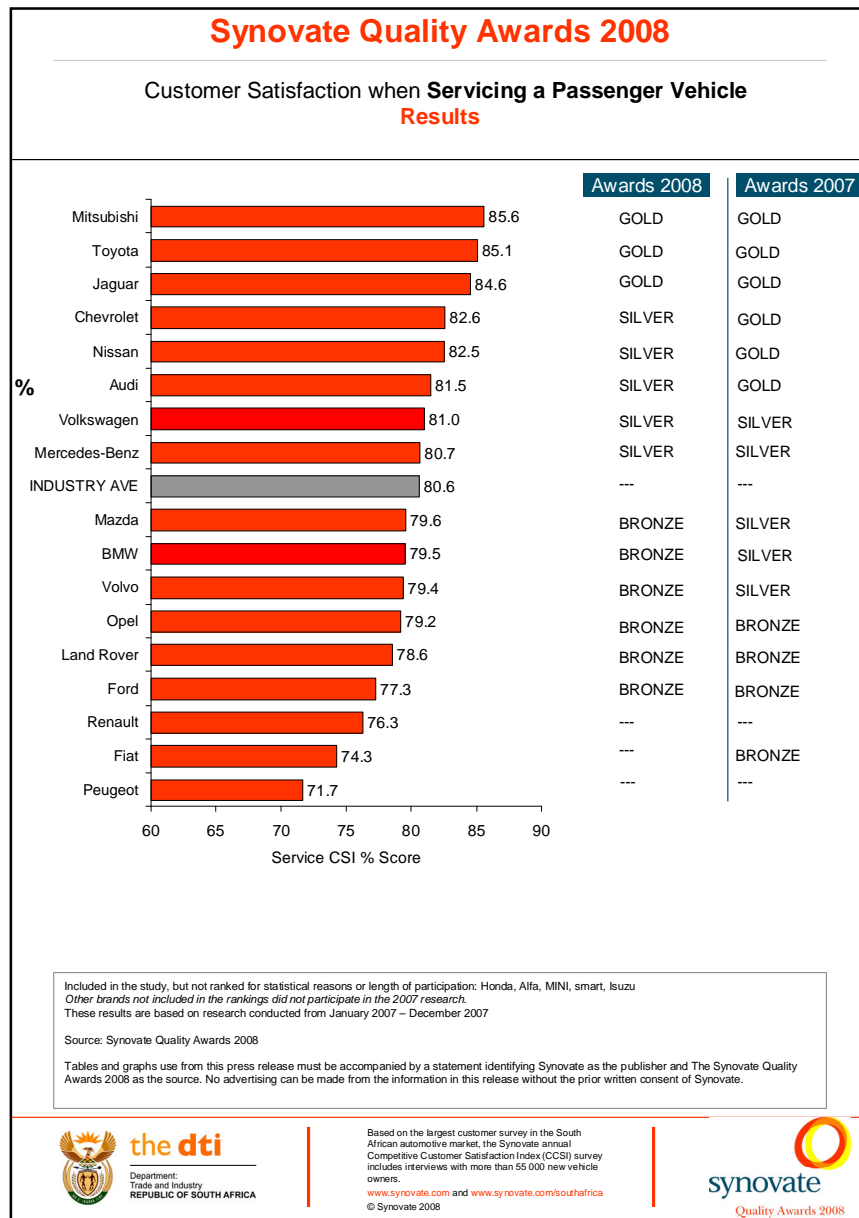


Figure 2.5: 2008 Synovate Quality Awards for Customer Satisfaction when servicing a New Passenger Vehicle (Synovate, 2008)

Having examined the two surveys used in the South African Motor Industry a few important points have been identified as being most relevant to the overall conclusions drawn in this study. Both studies concentrate on the manufacturers as a whole and the results of the studies are generated from information gathered from various dealerships in South Africa. This information is then combined as one whole score for each manufacturer. Another interesting or

important point is that the study performed by J.D. Power and Associates is an overall score which takes various factors into account; one of these factors includes “Vehicle Appeal” which is not taken into account in either model selected for this research. The other point is that the study done by Synovate is split into the purchasing and servicing experience. As a result, the CCSI study may be used as a benchmark in this research in order to validate the data and results obtained from the various dealerships.

Finally it must also be noted that the study done by J.D. Powers and Associates is limited to customers who have owned their vehicle for between 10 and 21 months and have taken the trouble to register, this has resulted in a sample size of 12 100. In the study done by Synovate around 55 000 new vehicle owners were interviewed. As with this research these studies are limited to the number of people interviewed; therefore if one looks at the projected vehicle sales for new vehicles to be sold in 2007 (380 000, extracted from Table 2.5); the sample for both studies is found to be relatively small when compared to the projected number of vehicles to be sold.

2.7 The Service Profit Chain

Put simply, the service profit chain theory states that “there are direct and strong relationships between profit; growth; customer loyalty; customer satisfaction; the value of goods and services delivered to the customer; and employee capability; satisfaction, loyalty, and productivity” (Heskett *et al.*, 1997) A summary of this can be found in Figure 2.6.

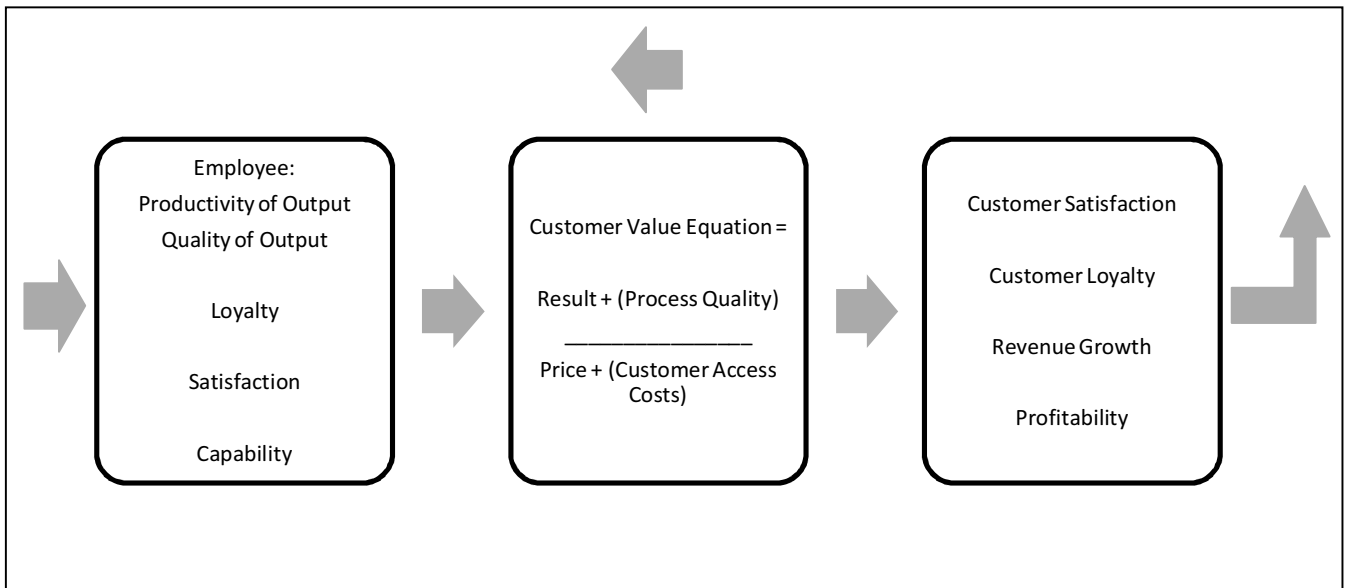


Figure 2.6: Elements of the Service Profit Chain (Heskett *et al.*, 1997, p. 12)

What is important to note is that no mention is made of market share in the above relationships. In studies performed by Sasser and Reichheld it was noted that in only a few of the industries studied market share was a more important predictor of profitability than customer loyalty. Heskett *et al.*, 1997 states that the strongest relationships found from the data collected in previous studies of the service profit chain were those between:

1. Profit and customer loyalty,
2. Employee loyalty and customer loyalty, and
3. Employee satisfaction and customer satisfaction.

Heskett *et al.*, 1997 suggest that the above relationships were self re-inforcing and that satisfied customers contributed to employee satisfaction and vice versa.

During this research the link that will be given most attention will be that of Customer Satisfaction and Profit. Earlier means of how to measure customer satisfaction through service quality was established. During this next section methods for measuring profit will be introduced and later the manner in which researchers have tried to measure the link between customer satisfaction and profit will be discussed.

2.8 Measurement of Profit

The accounting and economic concepts that are to be introduced and discussed below will allow one to have a better understanding of the systems used to measure profit. This allows one to have a better understanding of the data which is presented later.

In a company, regardless of whether it be in the service industry or not there are two critical measurements – one is concerned with measuring or knowing. The first measurement is the cost of the product or service sold; the second is the revenue earned from selling the product or service. With the use of these two measurements one is then able to calculate and measure the profits of the firm and the excess of revenue over costs. (Begg *et al.*, 1991, p 77)

‘Revenue’ is defined as the amount a firm ‘earns’ by selling goods or services in a given period – such as a year,’

‘Costs’ are defined as ‘the expenses incurred in producing goods or services during the same period as the revenue.’

‘Profits, as defined above, are ‘the excess of revenues after costs. Economists and accountants breakdown revenue, costs and profits into smaller subcategories, but then utilize and measure these concepts differently. Therefore, an explanation of each of the subcategories making up the revenue, cost and profit will be presented. However, the differences between accounting and economic measures will be illustrated.

Accountants are primarily interested in describing the actual receipts and payments of a company, while economists are more interested in the role of costs and profits, as determinants of the firm’s decisions.

Economists identify the cost of using a resource not as the payment actually made but as the ‘opportunity cost’. Opportunity cost is defined as ‘the amount lost by not using the resource (labour or capital) to its best alternative use.’

Another instance where one must take opportunity cost into account, is when considering capital. Here, one includes the opportunity cost of financial capital in the economic cost. When calculating accounting profit no cost is attached to the use of owned financial capital.

If after deducting this cost a company is still able to make a profit, economists refer to it as supernormal profit.

Supernormal profit is “the profit over and above the return which the owners could have earned by lending their money elsewhere at the market rate of interest.” (Begg *et al.*, 1991, p 100) Therefore, supernormal profit provides the economic indicator of how well the owners of the business have done by inputting their funds into their business. Supernormal profits are not the same as accounting profits. These are the measures which will explain the incentive to shift resources into or out of the business.

Physical capital is the ‘machinery, equipment and building used in production.’ (Begg *et al.*, 1991, p 98)

Economists use “capital” to denote goods not entirely used up in a production process during the year. Property and vehicles can be defined/regarded as capital since each can be used in the following year. Electricity is not a capital good since it is used up entirely during the period. Economists also use “durable goods” or “physical assets” to describe capital goods. When calculating profits and costs, the cost of “using” the capital, instead of buying the capital goods should be treated as part of the firm’s costs within the year. Therefore one should calculate the cost as a reduction on the value of the capital over the year. This amount of depreciation would then be the cost during the year.

Depreciation is defined as “the loss in value resulting from the use of machinery during the period.” (Begg *et al.*, 1991, p 99) Therefore, the cost during the period of using a capital asset is the depreciation or loss of value of that asset, not its purchase. Depreciation is one of the differences between economic profits and cash flow. The reason for viewing depreciation rather than purchase price as the true economic cost is thus to spread the initial cost over to the life of the capital goods.

Therefore, inventories are defined as “goods held in stock by the firm for future sale”. As production is not instantaneous, a company holds inventories to meet further demand.

Borrowing refers to when a company or firm wants to finance its setup and expansion costs by buying capital goods or paying consultation fees for the paper work involved in registering the company. One pays interest on borrowed money. This interest makes up part of the cost of doing business. Interest owed should therefore be calculated as part of the costs.

The income statement, otherwise known as a profit-and-loss account, illustrates the flow of money during a given year. This allows one to “paint a picture” of the position a company has reached as a result of all its trading operations. The balance sheet is a listing of the assets the company owns and the liabilities for which it is responsible.

Assets are defined as objects the company owns: and are shown on the left hand side of the balance sheet. Liabilities are defined as what the company owes: and appear on the right hand side of the balance sheet. Liabilities include unpaid bills, salaries, mortgage on a factory etc. Another financial component which affects the balance sheet is company earnings.

Retained earnings are part of the “after tax profits, that are ploughed back into the business rather than paid out to shareholders as dividends.” If one keeps the retained earnings as cash or uses them to buy new equipment, one will experience an increase on the side of the assets. Alternatively, retained earnings may be used to lower a company’s liabilities.

2.9 Dorfman-Steiner Theorem

In this chapter the theory determining the joint settings of various marketing factors that can maximise a firm’s profit will be studied. Before looking at the various factors a brief background on this topic will be provided.

Multiple Marketing Instruments

Prior to 1933, economists, who examined the problem of demand, restricted their attention to price. Economists maintained that under conditions of fixed incomes, and technology full information, and utility maximisation that the quality of demand per unit time would tend to vary inversely with price. i.e. $Q = f(P)$ where $dQ/dP < 0$. (Kotler, 1971, p 51)

This emphasis on the price was caused by a number of factors: (Kotler, 1971, p 51-52):

1. their interest in investigating and demonstrating the advantages of a free enterprise and supply levels;
2. the fact that price at one time had been the major marketing factor before branding, advertising, product differentiation and other modern marketing practices came into being; and
3. the fact that price is so much more measureable and consequently tractable, relative to other marketing variables in a formal analysis.

This concentration on price represents a cultural lag because advertising, branding, product differentiation and personal selling have been significant demand stimulants.

In 1933 two papers were written and published, that increased the scope and relevance of formal economic analysis for marketing problems. The first was written by Professor Edward H. Chamberlin of Harvard University and was called: "The Theory of Monopolistic Competition". The second was written by Joan Robinson of Cambridge University called "The Economics of Imperfect Competition." Both economists pointed out that there were forms of competition taking place in the modern world that were intermediates between the two established economic models of pure competition and pure monopoly.

Robinson was more concerned with variations of the monopoly model. This was done with the use of the geometric analysis, where she refined the theory of price discrimination and showed the influence of monopsony (buyer monopolies). Chamberlin proposed an intermediate market structure called monopolistic competition in which there were many firms and each had control over its demand.

Many economists ignored and disputed this theoretical development because it introduced an element of indeterminacy into the otherwise elegant structure of price theory. On the other hand, some economists considered the implications of non-price instruments for economic theory, the first being Boulding in 1941, followed by Stigler in 1946. In 1951 Brems extended the work done by Stigler and in 1954 Dorfman and Steiner showed algebraically the marginal conditions for setting price, advertising and product quality.

Dorfman-Steiner Theorem on Marketing Mix Optimisation

If one assumes that a company faces the general marketing mix demand function where:

$$Q = q(P, A, D, R) \quad (\text{Kotler, 1971}) \quad (4)$$

Where P is price, A is advertising, D is place (i.e. distribution) and R is the product and the company cost function is:

$$C = c(Q, R)Q + A + D + F \quad (\text{Kotler, 1971}) \quad (5)$$

Where c is the unit cost and is a function of quantity produced (Q) and the product quality (R). As a result the unit variable cost may vary with output and/or with the level of product quality. Advertising and distribution are treated as discretionary fixed costs and F represents the sum of nondiscretionary fixed costs. (Kotler, 1971, p 57)

If one sets up the short run profit function:

$$Z = PQ - C \quad (\text{Kotler, 1971}) \quad (6)$$

and substitutes in equations (4) and (5) then,

$$Z = P \cdot q(P, A, D, R) - \{c[q(P, A, D, R), R]q(P, A, D, R) + A + D + F\}$$

$$Z = P \cdot q(P, A, D, R) - c[q(P, A, D, R), R]q(P, A, D, R) - A - D - F \quad (\text{Kotler, 1971}) \quad (7)$$

From equation 7 it can be seen that profit depends in almost every way upon the levels and mix of marketing effort chosen by the firm.

Given the profit function (Equation 7) it is now easier to determine the necessary condition for marketing mix optimisation, and this is when: (Kotler, 1971, p 58)

$$\frac{\partial Z}{\partial P} = \frac{\partial Z}{\partial A} = \frac{\partial Z}{\partial D} = \frac{\partial Z}{\partial R} = 0 \quad (8)$$

That is, the response to profit to an infinitesimal change in any and all marketing instruments is zero. After one has found each partial differentiation of equation 7 and substituted it into equation 5 the end result shows:

$$e_p = MRP_A = MRP_D = e_p \frac{P}{c} \quad (\text{Kotler, 1971}) \quad (9)$$

Where:

$$e_p = -\frac{\partial Q}{\partial P} \cdot \frac{P}{Q} = \text{price elasticity of demand} \quad (\text{Kotler, 1971}) \quad (10)$$

$$MRP_A = P \cdot \frac{\partial Q}{\partial A} = \text{marginal revenue product of advertising} \quad (\text{Kotler, 1971}) \quad (11)$$

$$MRP_D = P \cdot \frac{\partial Q}{\partial D} = \text{marginal revenue product of distribution} \quad (\text{Kotler, 1971}) \quad (12)$$

$$e_R = \frac{\partial Q}{\partial R} \cdot \frac{\partial R}{\partial c} \cdot \frac{c}{Q} = \text{product quality elasticity of demand} \quad (\text{Kotler, 1971}) \quad (13)$$

In other words, equation 9 states that, as a necessary condition for profit maximisation the values of price, advertising, distribution and product quality must be set at such levels that price elasticity, the marginal revenue products of advertising and distribution, and the quality elasticity times price over units cost are equal (Kotler, 1971, p 59)

This is known as the Dorfman-Steiner theorem. It does not provide the optimal values of the marketing policy variables but rather conditions that will be satisfied when the optimal values are found.

2.10 Past Research on Performance Measurement through Financial Performance

Capon *et al.* (1990) perform a meta-analysis on determinants of financial performance. In their study Capon *et al.* (1990) review sets in both dependent variables measuring financial performance and non-financial explanatory factors. These financial performance variables included growth and variability in profit (typically related to assets, investments or owner's equity). Also included are measures like market value, assets, equity, cash flow, sales and market/book value. The non-financial explanatory factors include environmental, strategic and formal and informal organizational factors. (It must be noted that some of the above factors are included in both the explanatory and performance characteristics). Also not included in the meta-analysis, performed by Capon *et al.* (1990), are the interrelationship among different financial performance characteristics, and the studies documented relationships among sets of environmental, strategic and/or organizational variables, which take into account financial performance.

During the meta-analysis some 320 studies were used. Of the studies used 73 analysed performance at industry level, 205 at the firm level and 42 at the business level. Of the 205 at firm level, 163 used firms operating in multiple industries and 42 used single industry firms. The meta-analysis carried out Capon *et al.* (1990) used two methods, the first known as a counting methodology, the other an analysis of covariance otherwise known as ANCOVA.

In the counting methodology one identifies the sign of each empirical relationship relating to an explanatory variable to financial performance. For each financial performance model identified, each individual result was catalogued in terms of its independent and dependent variable; the sign of the relationship between these variables and a variety of technical data concerned with the measurement and research methodology. Counts of the signed relationship were then totalled.

When a value of comparable quantitative estimates for a particular relationship is available, it is often possible to estimate how much measurement, model and variable specification, estimation method and research affects the results. This is done by viewing a particular set of quantitative measures (an example of this are the regression co-efficient) as if they were generated by a natural experimental design. The effects of these specific study characteristics can then be estimated using ANCOVA.

As there are a large number of regression co-efficients linking the selected explanatory variables to the financial performance, Capon *et al.* (1990) found this meta-analysis to be feasible. Therefore 8 sets of regression co-efficients were used as dependant variables in 8 separate ANCOVAs. Each ANCOVA documented the relationship of one of the variables to financial performance. The variables included industry concentration, market share, growth, advertising, research and development, size and capital investment.

The results of the counting methodology found that for industry concentration a positive relationship between itself and the firm performance was supported. This was addressed in almost 100 studies. Growth was found to be consistently related to higher performance; and growth in assets and sales in particular showed positive relationships to performance at both industry and firm/business levels. A positive association with financial performance was also found for market share. The meta-analysis found no relationship to firm size at business level but some evidence of a positive relationship at industry level was found. When looking at capital investment a positive relationship to financial performance at industry level was found; while at firm/business level higher investment was found to relate to lower performance. Advertising intensity was found to be positively related to performance at both industry and firm level; while research and development spending related positively to company performance at firm level.

For the ANCOVA results an overall fit for each ANCOVA ranged from 24% for industry concentration to 88% for research and development. It must be noted that the high fit for research and development was as a result of less observation relative to the size of the design; while the lower fit for industry concentration points towards more richness in describing the research environments. When performing the ANCOVA Grand Mean and the Mean of the

Regression Co-efficients the hypothesis tested was that for all major theoretical frameworks the co-efficients for concentration, market share, growth, advertising and research and development were expected to be positive; while size and capital investments intensity played a vague role.

The results of the ANCOVA Grand Mean and the Mean of the Regression Co-efficients found the expected positive effect for concentration, market share, growth, advertising and research and development. Size and capital investment were found to have no significant effect.

From the meta-analysis performed by Capon *et al.* (1990) it was concluded that high growth situations are desirable and that growth is consistently related to profit under a variety of circumstances. On the other hand, having a high market share is useful, but no conclusive evidence of whether or not attempting to achieve market share is, in fact, a positive idea. Size does not necessarily award profitability. Money spent on research and development was found to have a strong relationship to increased profitability; while investments in advertising were also found to be meaningful. Finally it was found that high quality products and services enhanced performance; while excessive debt could hurt performance.

2.11 South African Motor Industry

In order to place this study of service quality in perspective the motor industry and trends occurring within the industry, over the past few years, will be presented. In addition, information about the sales and classification of vehicles of the South African motor industry is provided. The National Association of Automobile Manufacturers of South Africa (NAAMSA) was established in 1935 to represent companies and organisations which manufacture and market motor vehicles in the South Africa. In its annual report of 2007 NAAMSA (2007, p.6) reported an increase of 14.4% in the sales of new vehicles, which is equivalent to 81 582 more vehicles between the years of 2005 and 2006. In 2005 the total amount of vehicles sold were 565 018 and this increased to 646 556 vehicles in 2006. In the export market there was an increase of 28.6% which corresponds to 39 947 vehicles. In 2005, 139 912 vehicles were exported while in 2006, 179 859 were exported to various parts of the world. NAAMSA (2007, p.6) forecast an estimated 617 500 vehicle units would be sold in 2007 and 604 000 in 2008.

The manufacture of new motor vehicles in South Africa is split into four major categories: car; light commercial vehicles (LCV) which include bakkies and minibuses; medium commercial vehicles (MCV) and heavy commercial vehicles (HCV) which include trucks and buses. The combined domestic sales turnover of all four segments for 2006 (including Value Added Tax) is approximately R118,4 billion. In 2005 this value was R100,4 billion. Table 2.5 shows the reported domestic sales of recent years for all four categories.

Table 2.5: Domestic Sales for New Motor Vehicles in South Africa (McCraw, NAAMSA)

	2002	2003	2004	2005	2006	2007 Proj.	2008 Proj.
Passenger Vehicles	231 602	247 259	301 151	376 845	426 812	380 000	365 000
LCV	104 747	104 884	127 629	160 723	186 664	201 000	200 000
MCV	5 666	6 116	8 636	12 243	14 246	15 000	16 000
HCV	8 039	10 211	12 178	15 207	15 207	21 500	23 000
Total	350 054	368 470	449 594	565 018	646 556	617 500	604 000

In Table 2.6 a percentage breakdown of the various sectors of the automotive market from 2006 till 2008 Year to Date (March) can be seen. As can be seen from the Table below, the automotive market is split into four categories:

- Heavy Commercial Vehicles (HCV) (8501kg – 16500kg),
- Light Commercial Vehicles (LCV) (< 3501kg),
- Medium Commercial Vehicles (MCV) (3501-8500kg) and
- Passenger Vehicles (Cars)

Table 2.6: Market Share Breakdown of Vehicle Types (McCraw, NAAMSA)

Market	2006	2006 Market Share	2007	2007 Market share	2008 YTD (March)	2008 Market share (YTD, March)
Passenger Vehicles	426,822	66.01%	384,431	62.74%	85,769	60.75%
LCV	186,664	28.87%	191,218	31.21%	46,194	32.72%
MCV	14,246	2.20%	15,164	2.47%	3,674	2.60%
HCV	18,834	2.91%	21,895	3.57%	5,547	3.93%
TOTAL	646,566		612,708		141,184	

From Table 2.6 it can be seen that passenger vehicles sector make up the majority of the market. Therefore, the frame in which this study will be conducted is the service sector for passenger vehicles in the Gauteng Province; particularly in Johannesburg and Pretoria.

2.12 Conclusion

From this chapter it was established that SERVQUAL would be used to measure customer and employees expectations and perceptions while SERVPERF would be used to measure customer and employee's perceptions only. With the results from the SERVQUAL and SERVPERF models service quality scores would be calculated. These would indicate a customer's level of satisfaction. Also established in this chapter is that the link between customer satisfaction and profit would be studied through the use of the Service Profit Chain. Finally, an overview of the South African Motor Industry was given therefore, allowing the frame within which this research would be conducted, to be established.

3. Research Methodology

3.1 Introduction

To achieve the objectives set out in Chapter 2 and gather the correct data the correct type of tool to gather data is required. After having established which the correct tool is, the appropriate administrative methods must then be selected. In this chapter the various tools one can use to collect data will be introduced. This is then followed by an introduction to the various types of surveys one can use and the ways in which these can be administered. A detailed breakdown of the SERVQUAL and SERVPERF survey will then be given. An introduction to the pilot survey will be presented. Following on from this will be the results achieved during the pilot survey as well as a discussion of these results. The chapter will conclude with a description of the methodology to be used for data collection and the analytical techniques to be used when analysing the data.

3.2 The Research Instrument

There are many methods or instruments one can use to collect data from a population of people. The most commonly used methods are: (Bowman, 2010)

1. Surveys
2. Focus Groups
3. Observations
4. Vignettes

A short description of each instrument will be given with some of the advantages and disadvantages associated with each of these instruments.

3.2.1 Surveys

The survey instrument can be broken up into two separate tools: the first being the questionnaire type, while the second is the interview type. The questionnaire tool is used to gather information from a potentially large number of respondents when time and costs are a

restriction. The advantage of using a questionnaire is that one can reach a large sample of people at a reasonably low cost. It requires a simple administrative method and is quick and easy for the respondent to complete. The disadvantages of a questionnaire are the response rate, selective appeal, completion and fatigue of the interviewee. (Bowman, 2010)

Interviews, on the other hand, are more formalised and allow one to maximise his/her chance of finding rich, descriptive data. An interview allows one to gain a better understanding of people's values, experiences, opinions and attitudes. However, interviews can be time-consuming and costly.

3.2.2 Focus Groups

A focus group is used when investigating complex behaviour in group contexts. This allows one to discover how different groups think and feel and allows one to verify or clarify certain thoughts or feelings. The advantages are that one can get an in-depth feeling of how people think and feel. The disadvantages of a focus group are they can be time-consuming, costly and are also subject to group dynamics. (Bowman, 2010)

3.2.3 Observations

The method of using observations to collect data is the oldest and most basic method one can use. When using observations one is working from an outsider's perspective to record many aspects of phenomena as possible. This methodology is used when subjects cannot express their own opinions or are not aware of their behaviour. The advantages of using observations are that one is in direct contact with the subject, this therefore provides firsthand experience of the subject. This may also supply the observer with information on a sensitive topic and allow him/her to understand the importance of context. Disadvantages of this type of data collection is that data analysis can be time consuming and it has also been established that reasons for observed behaviour may be unclear to the researcher. (Bowman, 2010)

3.2.4 Vignettes

Vignettes are stories about individuals, situations and structures which make reference to important points in the study of perceptions, beliefs and attitudes. (Hughes, 1998) These are used to interpret the actions and occurrences that allow situational context to be explored and influential variables to be clarified. The advantages of vignettes are that these allow the researcher to manipulate variables in the study. The disadvantages are that vignettes are time consuming to setup and costly to run. (Bowman, 2010)

After having investigated the four most common instruments used to collect data in research it was decided that the most appropriate tool for this particular research would be the survey. The questionnaire format, in particular, seemed most suitable. This method would allow for a large sample of data to be collected and a simple method of administration could be used at a low cost.

In the next section a breakdown of the various types of questionnaires are discussed.

3.3 Survey Types

After having chosen a method with which to communicate; a decision on the structure and disguise of the questionnaire should be considered. (Churchill *et al.*, 1995, p 353)

Structure refers to the degree of consistency/standardisation in the questionnaire. If a questionnaire is highly structured it means that the questions posed to the customer are predetermined/pre-formulated. An unstructured questionnaire poses questions that allow the interviewee to answer questions in their own words and express their opinions. A questionnaire of intermediate structure poses fixed questions that allow for open ended responses.

Disguise refers to the amount of knowledge available to the customer about the study being conducted. In an undisguised questionnaire the objectives of the research being performed are made clear by the questions being posed. Conversely, a disguised questionnaire masks the real purpose of the study being conducted.

3.3.1 The structured-undisguised questionnaire

Churchill *et al.* (1995, p 353) state that the structured-undisguised questionnaire is the most common type of questionnaire used in market research. All questions are standardized i.e. same syntax and order of questions. This ensures that all respondents reply to the **same** questions. It is important to note that all structured-undisguised questionnaires have standardized answers. This means that the respondents are limited to the stated options. This style of questionnaire is said to consist of “fixed alternative questions”. The advantages of using such a questionnaire include: ease of administration and the ease of capture and analysis of recorded data.

In addition, “fixed alternative questionnaires” offer high degrees of reliability (i.e. reproducibility of results). There are various reasons as to why this style of questionnaire is reliable; the first being that the frame of reference is more obvious. In answer to the question “How often do you use your motor vehicle?” respondents could give several replies – i.e. “everyday”, “regularly” or “a great deal”. These replies would be difficult to interpret; so fixed alternative questionnaires would prove to be more reliable in such a case. The second reason is that if the questionnaire provides the respondent with alternative responses, the questions appear clearer to participants i.e. ambiguity is reduced and participants are more likely to give accurate, honest answers.

The major disadvantage of using such a questionnaire is that it forces the respondent to supply fixed answers and does not allow him/her to express an opinion. The high degree of reliability in using such a survey comes at the cost of a loss of complete validity, as sometimes the opinion is necessary to formulate a more accurate response.

Churchill *et al.* (1995, p 353) state that structured-undisguised questionnaires may not be the most functional tools for the collection of primary data on motivation. However, functionality improves considerably when this type of questionnaire is used to collect primary information on attitudes, intentions, awareness, demographic/socioeconomic characteristics and behaviour. This occurs because this type of question and answer does not require an ‘opinion’.

3.3.2 The unstructured-undisguised questionnaire

Here the purpose of the study is clear but responses to posed questions are designed to be open ended. This technique requires that an interviewer, responsible for data collection, probes the respondent/participant with pertinent questions to derive a well-rounded picture of the participant's position on the (sometimes sensitive) topics being studied. The disadvantages of using this technique includes the fact that interviews are time consuming and require significant man power to ensure a great number of interviews are conducted. A resultant from this is also that a large variation in the responses is obtained. In addition to the latter, skilled people are required to interpret responses. This further increases manpower, costs and time. Furthermore, the people's own background and frame of reference will influence the interpretation. Therefore, questions are raised about the validity and reliability of the results.

3.3.3 The unstructured-disguised questionnaire

Unstructured-disguised questionnaires have become an integral part of motivation research. The main objectives in these projective methods have been to hide the true nature of the survey by using disguised prompts.

Churchill *et al.* (1995, p 355) state that the basic assumption in projective methods is that "an individual's organisation of a relatively unstructured stimulus is indicative of a person's basic perceptions of the phenomenon and reactions to it." In other words, the more unstructured and ambiguous a stimulus, the more a person relies on and projects his/her emotions, needs, motives, attitudes and values into the answer or reaction that is given.

3.3.4 The structured-disguised questionnaire

A structured-disguised questionnaire is the least used survey method in marketing research. Structured-disguised questionnaires were designed to use the advantages created by the disguised questionnaire. This allowed one to reveal the subconscious motives and attitudes of the respondents but at the same time use the advantages of data capturing and analysis of structured questionnaires.

After having investigated the various survey types it has been decided that during this research a structured-undisguised questionnaire will be utilized. This type of survey has been chosen in the hope that a higher reliability, with respect to the data and results gathered from the various dealerships, will be achieved.

3.4 Administrative Methods

Malhotra (1999, p 179) defines that the four major methods for administering a survey are:

1. Telephone interviews
2. Personal Interviews
3. Mail Interviews
4. Electronic questionnaires

3.4.1 Telephone Methods

Traditional Telephone Interviews: This method involves calling a sample of customers and asking each person a series of questions. While conducting the interview, the interviewer records the response.

Computer-Assisted Telephone Interviewing: Computer-Assisted Telephone Interviewing (CATI) is more popular than traditional telephone interviews. With CATI a computerised questionnaire is read out to the respondents over the telephone. Data is captured by the interviewer inputting the respondent's answers into the computer. This reduces interviewing time, improves data quality and eliminates data capturing into the computer. This will also allow for report and data collection updates to be provided almost instantaneously.

3.4.2 Personal Methods

Personal interview methods can be split into three categories. (Malhotra, 1999)

Personal In-Home Interviews: Interviews are conducted in the respondent's home. Interviewers must contact the interviewee, ask them questions and record their answers.

Mall-Intercept Personal Interviews: Participants of the survey are intercepted while shopping. They are then taken to facilities at the mall. The advantage of mall-intercept personal methods is that it is more efficient for the respondent to come to the interviewer than the interviewer to go to the respondent.

Computer Assisted Personal Interviewing (CAPI): In this method the participant of the interview sits in front of a computer and inputs the answer into the computer with the use of a mouse and keyboard. The interviewer is present during the interview and acts as a host/guide to the interviewee.

3.4.3 Mail Methods

Mail Interviews: Potential interviewee's are mailed questionnaires. The respondent then completes the questionnaire and returns it. In this case there is no verbal communication between the researcher and the respondent.

Mail Panels: Malhotra (1999, p183) defines mail panels as a "large and national representative sample of households that has agreed to periodically participate in the mail questionnaires, product tests and telephone surveys." Family members receive various incentives for filling out their survey. This is a fairly costly process due to the incentives that are paid.

3.4.4 Electronic Methods

E-mail Interviews: The survey is sent out to respondents via email where the questionnaire appears in the body of the email. Respondents then click "reply" or "submit by email" and the data is entered and tabulated. There are several limitations with email surveys. An example can be found in a respondent choosing both "yes" and "no" where only one response is valid. These factors reduce the validity/quality of the data received.

Internet Interviews: Internet interviews are posted on websites. Respondents can reply to the survey online and submit their answers. Internet surveys have several advantages over email

surveys. These include adding features such as graphs, images and animations which keep the respondent involved in the survey. All these factors contribute to higher quality data.

3.4.5 Conclusion

A structured-undisguised questionnaire was chosen to gather data for the purposes of this research. This provides respondents with stated options, thus making the capturing of data easier and more efficient. At the same time the structured-undisguised questionnaire has a high degree of reliability when compared to the other three survey types mentioned above.

With respect to the administrative methods a more technology based approach was attempted for the pilot survey. People chosen to participate in the survey were first interviewed by telephone and a survey was emailed to them. Each individual chosen to participate in the pilot survey was called first. This was undertaken in order to introduce them to the study being conducted and it allowed them the opportunity to decline to participate in the survey rather than receive a survey they had heard nothing of.

3.5 Questionnaire Design for the present study

The questionnaire gathers some personal details about the individual being interviewed and will then set out to measure the expectations and perceptions of the service which is experienced by the customers. A copy of the survey handed out to customers at the various dealerships can be found in Appendix D.

The objective of the questionnaire is to measure "Customer Satisfaction" of the customers who use the dealership or to judge the service quality levels in the service department of the particular dealership. This will be based on the five service quality dimensions (namely tangibles, reliability, responsiveness, assurance and empathy). The questionnaire consists of four sections. A brief description of each section will be provided below. At the same time the questions posed, to the customers, will be structured and split into their respective service quality dimensions.

Finally, when designing the questionnaire, to be used in this research, a seven-point Likert Scale was chosen. i.e. 1 = Strongly Agree

4 = Neutral

7 = Strongly Disagree

The seven-point response scale was selected as it is the same scale as that used by Parasuraman *et al.* (1990) when first designing the SERVQUAL questionnaire. When looking at past research on SERVQUAL, in Appendix C, it was also found that the majority of researchers also used a seven point scale. Therefore, to allow one to be able to compare results attained in this research and results from Parasuraman *et al.* (1990) and various other SERVQUAL applications a seven-point scale was selected.

3.5.1 Section 1 – Customer Personal Details

This section contains questions aimed at generating data about the respondents. Questions asked in this section include:

1. Is this your first visit to this dealership?
2. What is the name of the dealer?
3. In which city/suburb do you live?
4. Do you work in the service industry? If so, please elaborate/specify.
5. Into which age category do you fall?

Question 1 is aimed at establishing whether or not the customer has visited the dealership before. This ascertains whether or not the customer is a regular one or has only recently begun using the said dealership. Therefore, one can ascertain whether there is a difference in expectations between “first time” and regular customers.

Question 2 allows for the identification of a specific dealership used by the customer.

Question 3 provides the location of the respondent. This allows one to check and see whether all people interviewed in this study fall within the frame of reference of the research which was stated earlier.

Question 4 determines whether or not the respondent works or has experience working in the service industry. This is important since it will allow one to see whether or not customers who work or have experience in the service industry are harsher when rating the service received. The relationship between customer service and working in the service industry is discussed in greater detail in subsequent text.

Question 5 was asked to determine the age category of the participant. This data will be used to determine whether or not the age of the interviewee has an influence on his or her service quality score.

3.5.2 Section 2 – Expectation Measurement

Section 2 contains the questions which will be used to measure the expectations of the customers. All questions have the same seven-level rating scale; where 1 equals strongly disagree; 4 is neutral and 7 equals strongly agree. In section 2 all five service quality dimensions of SERVQUAL will be measured. Below the 22 questions adapted from Parasuraman *et al.* (1990, p 181-183), are split into their dimensions. These questions are used to measure the respondent's expectations. (Note: the abbreviation EQ1 denotes Expectation Question 1 and so on.)

Tangibles

- EQ 1 Excellent service dealers will have modern-looking equipment.
- EQ 2 The physical facilities at excellent service dealers will be visually appealing.
- EQ 3 Employees at excellent service dealers will be neat in appearance.
- EQ 4 Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent service dealer.

Reliability

- EQ 5 When excellent service dealers promise to do something by a certain time, they will do so.
- EQ 6 When a customer has a problem, excellent service dealers will show a sincere interest in solving it.

- EQ 7 Excellent service dealers will perform the service correctly the first time.
- EQ 8 Excellent service dealers will provide their services at the time they promise to do so.
- EQ 9 Excellent service dealers will insist on error-free records.

Responsiveness

- EQ 10 Employees of excellent service dealers will tell customers exactly when services will be performed.
- EQ 11 Employees of excellent service dealers will give prompt service to the customers.
- EQ 12 Employees of excellent service dealers will always be willing to help customers.
- EQ 13 Employees of excellent service dealers will never be too busy to respond to a customer's request.

Assurance

- EQ 14 The behaviour of employees in excellent service dealers will instill confidence in customers.
- EQ 15 Customers of excellent service dealers will feel safe as they conduct their transactions.
- EQ 16 Employees of excellent service dealers will be consistently courteous to customers.
- EQ 17 Employees of excellent service dealers will have the knowledge to answer customers' questions.

Empathy

- EQ 18 Excellent service dealers will give customers individual attention.
- EQ 19 Excellent service dealers will have operating hours convenient to all their customers.
- EQ 20 Excellent service dealers will have employees who give customers personal attention.
- EQ 21 Excellent service dealers will have the customers' best interests at heart.
- EQ 22 The employees of excellent service dealers will understand the specific needs of their customers.

3.5.3 Section 3 – Importance Weightings

In section 3 the respondent (the customer) assigns an importance weighting to all the SERVQUAL dimensions through five statements. This is done by the respondent allocating 100

points between the five dimensions. Later these weightings are used to calculate the final “weighted” SERVQUAL. The five statements made to the respondent, adapted from Parasuraman *et al.* (1990, p 184), are shown below and have also been split into their five dimensions. At the same time the values assigned to each dimension will also be used when calculating the SERVPERF “weighted” score.

Tangibles

The appearance of the dealership's physical facilities, equipment, personnel and communication materials.

Reliability

The dealership's ability to perform the promised service dependably and accurately.

Responsiveness

The dealership's willingness to help customers and provide prompt service.

Assurance

The knowledge and courtesy of the dealership's employees and their ability to convey trust and confidence.

Empathy

The caring, individualized attention the dealerships provide its customers.

3.5.4 Section 4 – Perception Measurement

Section 4 contains the questions which will be used to measure the perceptions of the respondents. Again all 22 questions have the same seven level rating scale; where 1 equals strongly disagree; 4 is neutral and 7 equals strongly agree. Once more, in section 4 all five service quality dimensions of SERVQUAL will be measured. The perception score assigned to each question by the customer will also be used to calculate the SERVPERF score. The questions, shown below, which have been split into their dimensions are adapted from

Parasuraman *et al.* (1990, p 185-186), and will be used to measure the respondent's perceptions. (Note: the abbreviation PQ1 denotes Perception Question 1 and so on.)

Tangibles

- PQ 1 My service dealer has modern-looking equipment.
- PQ 2 The physical facilities are visually appealing in my service dealer.
- PQ 3 Employees at my service dealer are neat in appearance.
- PQ 4 Materials associated with the service (such as pamphlets or statements) are visually appealing at my service dealer.

Reliability

- PQ 5 When my service dealer promises to do something by a certain time, it does so.
- PQ 6 When a customer has a problem, my service dealer shows a sincere interest in solving it.
- PQ 7 My service dealer performs the service right the first time.
- PQ 8 My service dealer provides its service at the time it promises to do so.
- PQ 9 My service dealer insists on error-free records.

Responsiveness

- PQ 10 Employees at my service dealer tell the customer when services will be performed.
- PQ 11 Employees at my service dealer give prompt service to customers.
- PQ 12 Employees at my service dealer are always willing to help customers.
- PQ 13 Employees at my service dealer are never too busy to respond to a customer's request.

Assurance

- PQ 14 The behaviour of employees at my service dealer instills confidence in customers.
- PQ 15 Customers of my service dealer feel safe as they conduct their transactions.
- PQ 16 Employees at my service dealer are consistently courteous with customers.
- PQ 17 Employees at my service dealer have the knowledge to answer a customer's questions.

Empathy

- PQ 18 My service dealer gives customers individual attention.
- PQ 19 My service dealer has operating hours convenient to all its customers.

PQ 20 My service dealer has employees who give you personal attention.

PQ 21 My service dealer has the customer's best interests at heart.

PQ 22 The employees of my service dealer understand the specific needs of their customers.

3.6 Initial Methodology

This section describes the initial methodology (pilot survey) used in this research.

1. A 'draft' questionnaire used during this research was first drawn up. This survey consisted of the questions presented in the previous section.
2. A pilot survey was then conducted. A detailed breakdown of the pilot survey is presented in Section 3.6. A pilot survey was conducted to find the correct parameters within which to work. At the same time this resulted in the establishment of a frame of reference within which to collect data. This, in turn, allowed for a more accurate analysis.

3.7 Pilot Survey

3.7.1 Introduction

The pilot survey was conducted to ensure the wording and structure of the questionnaire was clear to the respondents. At the same time two types of administrative methods were used and their advantages and disadvantages were explored. The two types of administrative methods applied during the pilot survey were 'Traditional Telephone Interviews' and 'E-mail Interviews'. Customers who had serviced their vehicles two weeks prior to the chosen date for the pilot survey were contacted. At first, each customer was called and an explanation of the research being conducted, was given. If the customer consented to performing the research their email address was taken and the survey was then emailed to each customer.

3.7.2 Results

The pilot survey was conducted over a period of a week and a half. During this time a total of 156 calls were made to various customers. In Table 3.1 a summary of the results for the pilot survey calls have been tabulated.

Table 3.1: Summary of results from Pilot Survey

		Percentage
Number of Respondents who replied 'Yes' and accepted to participate in the survey. Note: Three customers asked for the form to be faxed.	63	40%
Number of Respondents who replied 'No' and declined to participate in the survey.	11	7%
Number of Calls to which there was no response.	70	45%
Number of calls made to an incorrect number.	12	8%
TOTAL CALLS	156	100%

A detailed breakdown of all calls made can be found in Table E1, in Appendix E.

Of the 63 customers who consented to participate in the research three asked for the survey to be faxed and four of the e-mails returned an "Error Sending Reply". Therefore only 56 customers received the surveys. Of the 56 customers who received their surveys only 18 responded. Therefore, of the total calls made only 32% of customers who received the survey replied and only 11.5% of customers were interviewed. In addition, the average time respondents took to reply was 2.4 days.

In respect of the wording and structure of the questionnaire it was found that all respondents understood most of the questions presented and all were happy with the structure of the questionnaire. The only question which posed a problem was Question 4 in the section Customer Personal Details: "Do you work in the service industry?" Some interviewees misunderstood the question. In their responses they referred to location instead of type of industry. It was decided that to rectify this problem, customers completing the survey would be given an example, so as to avoid any confusion.

3.7.3 Conclusion

The advantage of using the Traditional Telephone Interview and E-mail Interview was that a large sample of customers was contacted during the period in which the pilot survey was being conducted. The disadvantage of the E-mail Interview is that there was a lack of response, this can be seen from the low rate of response. To interview a larger sample of people more time

would have to be spent on making phone calls and e-mailing customers. This would still not guarantee a better response rate, nor would it guarantee that people would reply. Upon further investigation in literature, in fact in a paper by Hardré *et al.* (2007), it was found that in a comparison between paper-based, computer-based and web-based interviews, respondents preferred the paper-based administrative method to the computer-based and web-based administrations. In the light of the above it was decided that a week would be spent at each dealership. The “Mall-Intercept Personal Interview” would be the chosen method to administer the questionnaire to the customers, at each dealership. This would allow for a larger, more controlled sample of interviews to be conducted at each dealership. In this way a better appreciation of the environment created by the dealership could also be achieved.

3.8 Data Collection

Following on from the results of the pilot survey the following methodology was used to collect data for this research.

1. A week was spent at each dealership selected.

All dealerships chosen were selected at random within the Johannesburg and Pretoria frame of study. A total of thirteen dealerships were selected.

2. During the time spent at each dealership customers who were delivering their vehicle for service, were interviewed.

During the interview each customer would be asked to complete a survey consisting of four sections (Section 1: Customer Personal Details; Section 2: Expectation Measurement; Section 3: Importance Weighting and Section 4: Perception Measurement). Customers who had experienced the service at the dealership before would be able to fill out the entire survey while waiting. Customers who were visiting the dealership for the first time would only be able to complete the first three sections/categories of the questionnaire. Section 4 (Perceptions Measurement) would then be e-mailed to the customer.

3. After all the relevant data was gathered, analyses would be performed and discussions on further research or analysis could then be conducted.

3.9 Analysis Methodology

In this next section the types of data that will be presented in the chapters to follow will be discussed. The analytical methods that will be used to evaluate the data are then discussed.

3.9.1 Data Types

There are many different types of data that exist, these include categorical, numerical, discrete, continuous and ratio data.

Categorical data is a set of data that can have its values or observations sorted according to a category. Each value within the data set is chosen from a set of non-overlapping categories. (Easton *et al.* 1997) Numerical data or quantitative data are data that can be counted or measured using a numerically defined method (Cherry, 2010). Discrete data is when the observations of the data set are distinct and separate (Easton *et al.* 1997). Continuous data are data that take on any value or number within a finite or infinite interval (Easton *et al.* 1997).

In this research the data is categorical. The first category the data can be split into is expectations and perceptions scores. Within the two categories data can then be split into a further five categories; the five service quality dimensions: Tangibles, Reliability, Responsiveness, Assurance and Empathy.

3.9.2 Reliability

Reliability deals with accuracy. (Leedy, 1981, p. 28) It raises the question: "With what accuracy does the measure (test, investment, inventory, questionnaire) measure what it is intended to measure?" (Leedy, 1981, p. 28) No research can advance without data and just collecting data in a raw, undisciplined form has little use. One must find a means of correlating data by submitting it to a process of measurement.

In the paper by Asubonteng *et al.* (1996) the method for calculating reliability co-efficients was achieved by means of Cronbach's alpha. The formula for calculating Cronbach's alpha is supplied in equation 14.

$$\alpha = \frac{N}{N-1} \left(\frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{y_i}^2}{\sigma_x^2} \right) \quad (\text{Cronbach, 1951}) \quad (14)$$

Where:

N = Number of components (items or testlets)

σ_x^2 = Variance of the observed total test scores

$\sigma_{y_i}^2$ = Variance of component *i*.

Values of Cronbach's alpha to be used as benchmarks in this research will be drawn later from past research where the same or similar models have been used to measure service quality.

3.9.3 Validity

Validity is concerned with the soundness and the effectiveness of the measuring instrument. (Leedy, 1993) There are various types of validity. The most common types of validity are: Face Validity, Criterion Validity, Content Validity, Construct Validity, Internal Validity and External Validity. The definitions of each of these types of validity are listed below:

- **Face Validity:** This validity relies on the subjective judgment of the researcher. It asks two questions of the researcher: (Leedy, 1981, p. 27)
 1. "Is the instrument measuring what it is supposed to measure?"
 2. "Is the sample being measured adequate to be representative of the behaviour or trait being measured?"

- **Criterion Validity:** Criterion validity is the 'extent to which the measurement correlates with an external criterion of the phenomenon under study.' (IUPAC, 2007)

-
- **Concurrent Validity:** Concurrent validity refers to a measurement's ability to correlate or vary directly with an accepted measure of the same construct. An example of concurrent validity is if a new test of intelligence would have a concurrent validity if the correlation between it and the Wechsler IQ test were positive. (Heffner Media Group, 2003)
 - **Content Validity:** Content validity is the accuracy with which an instrument measures the factors or situations in research that is being carried out – e.g. the “content” of the study. (Leedy, 1981, p. 27)
 - **Construct Validity:** Construct validity is concerned with the general validity of a measurement device. For example: “Does the instrument measure the construct or value that it is intended to measure?” (Heffner Media Group, 2003)
 - **Convergent Validity:** Convergent validity is ‘the ability of a measurement scale to correlate or converge with other measures of the same variable.’ (ESOMAR, 2006)
 - **Discriminant Validity:** Discriminant validity refers to a measurement's ability to correlate inversely with an acceptable measure of the opposite construct. An example of discriminant validity is noticed if the correlation between a new test for depression and an accepted test of self-esteem is negative. (Heffner Media Group, 2003)
 - **External Validity:** External validity is concerned with the generalizability of the conclusions reached through observations of a sample to the universe. Basically this refers to whether the conclusions drawn from the sample can be applied to other cases? (Leedy, 1981, p. 27)
 - **Internal Validity:** Internal validity is the freedom from bias in forming conclusions in respect of the data. It seeks to establish that the changes in the dependent variable are the result of the influence of the independent variable, rather than the manner in which the research was designed. (Leedy, 1981, p. 27)

3.10 Chapter Overview

In this chapter the various methods one can use to collect data are investigated. The decision was made to use the survey instrument as a way in which to collect data. A structured un-disguised questionnaire would be used. Surveys would be conducted both telephonically and electronically for the pilot survey and then personally at the dealerships for the main survey. This allowed one to test the reliability and strength of each method. From the pilot survey results the decision was taken to collect data at the dealership as it was felt that more interviews could be conducted and therefore more data could be collected.

4. Data Collection

4.1 Introduction

In this chapter the data collected during the research from the customers and employees are presented. The interview success rate will clarify the procedures followed for the collection of data as well as the sample being used. A sample of the data collected from one dealership for the customers and employee will also be presented.

4.2 Interview Success Rate

During the visit to each of the dealerships a number of customers were interviewed face-to-face. Table 4.1 shows a summary of the customers intercepted and interviewed at each dealership. In total 577 customers were intercepted and 456 customers were successfully interviewed. The numbers in brackets represent first time customers who could only fill out the first three sections of the survey (Personal Details, Expectations measurement and Importance weighting). This was because it was their first visit to the dealership and therefore these customers could not rate the dealership until they had had their vehicle serviced. In these cases the fourth section of the survey (Perception measurements) was emailed to the customer. Customers who did reply to the email were included in the successful interviews. The number of customers who did not reply, have been recorded in the brackets. The success rate was calculated by dividing the number of customers interviewed by the number of people intercepted.

Table 4.1: Summary of Customer Interview Success Rate

DEALERSHIPS	INTERCEPTED	INTERVIEWED	SUCCESS RATE	DEALERSHIPS	INTERCEPTED	INTERVIEWED	SUCCESS RATE
Dealership A	42	37 (0)	88%	Dealership H	31	23 (3)	74%
Dealership B	69	59 (1)	86%	Dealership I	65	54 (2)	83%
Dealership C	22	16 (1)	73%	Dealership J	75	58 (10)	77%
Dealership D	38	28 (5)	74%	Dealership K	70	59 (4)	84%
Dealership E	23	19 (2)	83%	Dealership L	25	21 (1)	84%
Dealership F	29	15 (4)	52%	Dealership M	42	33 (3)	79%
Dealership G	46	34 (5)	74%	TOTAL	577	456 (41)	79%

Of the 577 customer intercepted 456 were successfully interviewed. This resulted in an average success rate of 79% among the various dealerships. Dealership F was the only dealership below 73% as most customers would drop off their vehicles and have pre-arranged lifts scheduled and therefore they would not use the lift option made available to them by the dealership. As a result of this it was difficult to interact with them.

Other reasons which contributed to the 81 unsuccessful interviews were:

- Some customers could not communicate fluently in English and therefore could not understand the purpose of this study.
- Some customers did not fill out the survey correctly and therefore these questionnaires were regarded as unsuitable for use.
- Some customers were unwilling to fill out the survey.
- Some customers were interrupted while completing the survey and therefore could not complete the survey.

In Table 4.2 the number of employees who were interviewed at each dealership is shown. The employees interviewed were those who interacted with the customer during the customer's experience at the dealership. These include dealership principles, service consultants and at times employees within the workshop. Only specific employees were selected and interviewed during the time spent at each dealership therefore no interview success rate for the employees' questionnaires is calculated.

Table 4.2: Number of Employees interviewed at each Dealership

DEALERSHIPS	EMPLOYEES INTERVIEWED	DEALERSHIPS	EMPLOYEES INTERVIEWED
Dealership A	8	Dealership H	3
Dealership B	13	Dealership I	5
Dealership C	4	Dealership J	7
Dealership D	8	Dealership K	9
Dealership E	3	Dealership L	5
Dealership F	7	Dealership M	5
Dealership G	5	TOTAL	82

Before moving onto the sample data a comparison of the sample sizes attained during this research must first be made with the sample sizes of other SERVQUAL studies performed in the past in Appendix C. This will allow one to see whether or not the results attained in this research are comparable with those attained in the past. Looking at Tables C1 to C5 it was found that the sample sizes ranged from 27 to 775, while in this research the sample sizes for the two data sets were 456 and 82 respectively. The sample sizes attained in the research fall within the largest and smallest sample sizes of past research and therefore comparison between this current research and past research can be made.

4.3 Sample Data

4.3.1 Customers

The data presented in this section is for the Customers from Dealership C, where an interview success rate of 73% was achieved. Each section contains four categories, these include: Personal Details; Expectation Measurements; Importance Weightings and Perception Measurements. The data collected for the customers of the other 12 dealerships can be found in Appendix F. All customers who did not complete the surveys have been included in both the data and results tables as they were included in the sample taken, as shown in Table 4.1.

Table 4.3 illustrates the answers received for Section 1 (Customer Personal Details) from all the customers interviewed at Dealership C. It must be noted that this was the first visit of Customer 17 to Dealership C but this Customer did not reply to the email sent with the second half of the survey and therefore there are no Perception Measurement scores. Therefore in all the Tables containing customers' data a gap was left between customers who filled in the entire survey and those who only filled in the first part of the survey.

Table 4.3: Personal Details for Customers at Dealership C

DEALERSHIP C					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	Yes	Greenside	No		35-44
Customer 2	No	Sandton	Yes	Financial Services	25-34
Customer 3	No	Midrand	No		25-34
Customer 4	No	Bryanston	Yes	Financial Services	25-34
Customer 5	No	Greenside	No		35-44
Customer 6	No	Pine Park	Yes	IT	>55
Customer 7	No	Soweto	Yes	Discovery Health	25-34
Customer 8	Yes	Hyde Park	No		>55
Customer 9	Yes	Roodepoort	No		25-34
Customer 10	No	Atholl	Yes	Software	25-34
Customer 11	No	Parkwood	Yes	Lecturer	35-44
Customer 12	No	Melville	Yes	Auditing	25-34
Customer 13	No	Parkhurst	No		35-44
Customer 14	No	Auckland Park	Yes	Church	>55
Customer 15	No	Sandton	Yes	Caterer	45-54
Customer 16	No	Emmarentia	No		35-44
Customer 17	Yes	Randburg	No		25-34

The data collected in Table 4.3 will be used during the analysis of the SERVQUAL and SERVPERF data. The data in Column 2 (First Visit) will be used to see whether or not there is a significant statistical difference between a customer using a dealership for the first time when compared with a customer who uses the dealership regularly. The data in Column 4 (Service Industry) will be used to investigate whether or not the type of industry a customer works in has a significant difference on his/her service quality score. The data in Column 5 (Industry Specified) was used to validate the customer's answer in Column 4. Finally, the data in Column 6 (Age Group) will be used to see whether or not the age of customers has an influence on how they rate the service.

Tables 4.4 and 4.6 show the customers' expectation and perception scores as assigned to each question for the various dimensions. The questions asked are those that appear in Section 2 (Expectation Measurement) and Section 4 (Perception Measurement) of the questionnaire presented to the customers. Table 4.5 shows the customers' importance weightings as assigned

to each dimension. These weightings were assigned by the customer after he/she had read the statements in Section 3 (Importance Weightings) of the questionnaire.

Before the data captured from the customers are presented a reminder of the scores and their meaning is listed below:

- 1 = Strongly Disagree
- 4 = Neutral
- 7 = Strongly Agree

Table 4.4: Expectation Scores for Customers at Dealership C

DEALERSHIP C																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	5	6
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 3	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Customer 4	4	5	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	7	7	7	7	6	6	5	5	5	7	7	7	6	7	7	7	6	7	7	7	7	6
Customer 6	6	5	5	6	7	5	6	6	5	6	6	7	6	6	7	5	5	5	6	6	6	6
Customer 7	6	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	6
Customer 8	4	4	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 9	7	7	5	5	7	6	7	7	7	7	7	7	5	7	7	7	7	7	5	7	7	7
Customer 10	6	6	6	5	7	7	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7
Customer 11	5	6	7	6	7	7	7	7	7	6	7	7	7	6	6	6	7	6	6	6	6	6
Customer 12	5	6	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 13	6	6	6	5	7	7	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	5
Customer 14	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 15	5	5	7	6	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7
Customer 16	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 17	4	4	4	4	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	6	7	7

Table 4.5: Importance Weighting Scores for Customers at Dealership C

DEALERSHIP C					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	30	20	20	20
Customer 2	15	10	50	20	5
Customer 3	15	15	30	30	10
Customer 4	4	70	20	6	0
Customer 5	5	80	10	5	0
Customer 6	20	25	20	20	15
Customer 7	10	60	5	5	20
Customer 8	0	70	10	10	10
Customer 9	10	50	20	10	10
Customer 10	10	25	25	20	20
Customer 11	10	20	20	40	10
Customer 12	10	40	30	10	10
Customer 13	10	50	10	20	10
Customer 14	20	40	20	10	10
Customer 15	10	50	10	20	10
Customer 16	5	35	20	20	20
Customer 17	10	60	10	10	10

Table 4.6: Perception Scores for Customers at Dealership C

DEALERSHIP C																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	6	5	5	5	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 2	3	2	2	2	1	1	1	1	4	3	1	1	1	1	1	3	1	2	4	1	1	1
Customer 3	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	5	5	5	5	1	1	1	1	1	1	1	2	2	2	2	2	2	2	4	2	2	1
Customer 5	6	7	7	7	5	5	5	5	5	6	6	7	7	7	7	7	7	5	7	7	6	6
Customer 6	5	5	6	5	6	6	5	6	6	7	6	6	6	6	6	6	5	6	6	6	6	6
Customer 7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7
Customer 8	2	2	4	4	7	7	4	7	4	7	7	7	5	6	5	7	7	7	4	7	4	5
Customer 9	4	5	6	4	6	6	6	6	6	4	7	5	4	5	4	5	4	5	4	6	4	4
Customer 10	5	5	5	5	4	6	4	5	4	6	5	4	4	5	6	5	4	5	6	5	5	4
Customer 11	6	6	6	5	5	5	5	5	5	6	6	5	5	6	5	6	6	6	6	6	6	6
Customer 12	4	4	4	4	4	5	4	5	5	5	5	5	5	4	5	6	5	5	4	4	4	4
Customer 13	6	5	5	5	6	6	6	6	5	6	6	6	5	5	6	6	6	6	6	6	6	6
Customer 14	7	7	7	7	1	1	1	1	1	7	1	6	6	2	6	7	6	7	7	7	6	6
Customer 15	7	7	6	7	4	7	4	6	5	6	5	7	5	5	6	7	5	7	5	6	5	6
Customer 16	6	5	5	5	5	5	3	3	4	3	4	4	5	3	3	6	3	5	6	5	4	5
Customer 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

4.3.2 Employees

In Table 4.7, the personal details of the employees are listed. Only the age group of each employee interviewed was captured. This was because all employees were given the same questionnaire as the customers and therefore the only applicable question was that of: "To which age group category do you belong?"

Table 4.7: Personal Details for Employees at Dealership C

DEALERSHIP C	
Personal Details	
Employee	Age Group
Employee 1	35-44
Employee 2	25-34
Employee 3	35-44
Employee 4	25-34

Table 4.8 shows the importance weighting assigned to each dimension by the various employees.

Table 4.8: Importance Weighting Scores for Employees at Dealership C

DEALERSHIP C					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	10	20	30	20	20
Employee 3	20	20	20	20	20
Employee 4	5	50	15	20	10

Tables 4.9 and 4.10 show the employees' expectation and perception scores for the 44 questions asked in the survey. The same score key is applied to the customers and the employees. The data collected for the employees of the other 12 dealerships can be found in Appendix G.

Table 4.9: Expectation Scores for Employees at Dealership C

DEALERSHIP C																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	5	7	7	5	7	7	7	7	5	7	7	7	7	7	7	7	7	7	5	7	7	7
Employee 2	6	6	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7
Employee 3	4	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	6	7	7	7	7	7
Employee 4	4	6	7	6	7	7	7	7	7	6	7	7	7	7	7	7	6	7	6	7	7	7

Table 4.10: Perception Scores for Employees at Dealership C

DEALERSHIP C																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	5	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 2	5	6	6	6	6	6	5	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7
Employee 3	6	6	7	7	6	7	6	6	6	7	7	6	7	7	7	6	7	7	7	7	7	7
Employee 4	4	4	4	3	4	5	3	3	7	5	6	6	6	5	4	6	4	6	6	6	4	4

4.4 Sample Financial Data

In this section the financial data collected from Dealership C are presented. Any calculations performed on the data or gathered from the data will be shown in the chapter to follow. All data shown in Table 4.11 were extracted from the income statement for the service department of each dealership. No units are provided in order to disguise proprietary information. The financial data for the other dealerships investigated during this research can be found in Appendix H.

Table 4.11: Financial Data for Dealership C

DEALERSHIP C			
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN	
Labour Sales Customer	1493	Supply/Material/Consum. Sales	89
Labour Sales Warranty	368	Sublet/Outwork	144
Labour Sales Internal	149	Own Orders	0
Labour Sales Other	0	Oil & Grease	135
		Sundry Sales	0
		Tyres & Tubes	0
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN	
Labour Cost – Customer	193	Supply/Mat/Consum. Costs	9
Labour Cost – Warranty	0	Sublet/Outwork Costs	116
Labour Cost – Internal	0	Own Orders Costs	0
Labour Cost – Other	0	Oil & Grease Costs	91
TRADING EXPENSES/REVENUE BREAKDOWN		Additives Costs	0
Idle Time	136	Tyres & Tubes Costs	0
Salvage Gains	3	Cleaning Costs – In House	0
Incentive Received	13	Cleaning Costs - Sub Contractors	146
Volume Discount Allowed	14	Parts Other Makes	0

Only components of the income statement which could allow one to calculate the gross profit as generated from a customer's perspective were extracted. In other words, the data that would allow one to calculate the gross profit generated from customers services.

4.5 Chapter Overview

In this chapter the sample size of the research was presented. The collected data for Dealership C for both the Customers and Employees was presented. The chapter concluded with the financial data of Dealership C being presented.

5. Analysis and Results

5.1 Introduction

In this chapter the processing of the data collected during this research is demonstrated. The first part of data processing includes the calculations relating to the customer and employee SERVQUAL and SERVPERF scores. This is then followed by the sample calculations for the financial and statistical data processing.

5.2 Primary Analysis: SERVQUAL and SERVPERF

This section contains the calculated results from Dealership C and the sample calculations of how each result was determined. The results for the customers calculated scores have been split into five sections. These sections include Expectation Sub-Totals; Perception Sub-Totals; Calculated Scores for both SERVQUAL and SERVPERF and Cronbach Alpha Scores. The sample calculations for the various tables will be illustrated after each Table. For the sample calculations the data from Customer 5 (highlighted in the tables) will be used to demonstrate how each score was calculated. The results relating to the other 12 dealerships can be found in Appendix I.

5.2.1 Customers

Table 5.1 shows the sub-total scores for the expectations of the customers interviewed at Dealership C. The sub-total scores in Table 5.1 were calculated from the data in Table 4.4. Each score from Table 4.4 relating to the specific dimension was then added together. This, in turn, illustrates the sub-total score for each dimension. The five sub-total dimension scores are then added together to give the total expectation score.

Table 5.1: Expectation Sub-Total Scores for Customers at Dealership C

DEALERSHIP C						
Expectation Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	30	24	24	28	130
Customer 2	28	35	28	28	34	153
Customer 3	28	33	28	28	33	150
Customer 4	19	31	28	28	35	141
Customer 5	28	27	27	27	34	143
Customer 6	22	29	25	23	29	128
Customer 7	27	34	28	28	33	150
Customer 8	18	35	28	28	35	144
Customer 9	24	34	26	28	33	145
Customer 10	23	35	28	26	35	147
Customer 11	24	35	27	25	30	141
Customer 12	21	35	28	28	35	147
Customer 13	23	32	25	24	29	133
Customer 14	28	35	28	28	35	154
Customer 15	23	35	27	27	35	147
Customer 16	28	35	28	28	35	154
Customer 17	16	33	28	28	34	139

The manner in which each dimension sub-total score is calculated is shown below. As stated earlier, the abbreviation EQ1 denotes Expectation Question 1 and the abbreviation PQ1 denotes Perception Question 1.

Tangibles:

$$\begin{aligned}
 & (EQ 1) + (EQ 2) + (EQ 3) + (EQ 4) \\
 & = 7 + 7 + 7 + 7 \\
 & = 28
 \end{aligned}$$

Reliability:

$$\begin{aligned}
 & (EQ 5) + (EQ 6) + (EQ 7) + (EQ 8) + (EQ 9) \\
 & = 6 + 6 + 5 + 5 + 5 \\
 & = 27
 \end{aligned}$$

Responsiveness:

$$\begin{aligned} & (\text{EQ 10}) + (\text{EQ 11}) + (\text{EQ 12}) + (\text{EQ 13}) \\ & = 7 + 7 + 7 + 6 \\ & = 27 \end{aligned}$$

Assurance:

$$\begin{aligned} & (\text{EQ 14}) + (\text{EQ 15}) + (\text{EQ 16}) + (\text{EQ 17}) \\ & = 7 + 7 + 7 + 6 \\ & = 27 \end{aligned}$$

Empathy:

$$\begin{aligned} & (\text{EQ 18}) + (\text{EQ 19}) + (\text{EQ 20}) + (\text{EQ 21}) + (\text{EQ 22}) \\ & = 7 + 7 + 7 + 7 + 6 \\ & = 34 \end{aligned}$$

TOTAL:

$$\begin{aligned} & (\text{Tangibles}) + (\text{Reliability}) + (\text{Responsiveness}) + (\text{Assurance}) + (\text{Empathy}) \\ & = 28 + 27 + 27 + 27 + 34 \\ & = 143 \end{aligned}$$

The same method which was used to calculate the sub-total scores and total expectation score in Table 5.1 was used in Table 5.2 to calculate the total perception score. A set of sample calculations is listed below.

Table 5.2: Perception Sub-Total Scores for Customers at Dealership C

DEALERSHIP C						
Perception Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	21	34	28	28	35	146
Customer 2	9	8	6	6	9	38
Customer 3	27	35	28	28	35	153
Customer 4	20	5	6	8	11	50
Customer 5	27	25	26	28	31	137
Customer 6	21	29	25	23	30	128
Customer 7	26	35	28	28	32	149
Customer 8	12	29	26	25	27	119
Customer 9	19	30	20	18	23	110
Customer 10	20	23	19	20	25	107
Customer 11	23	25	22	23	30	123
Customer 12	16	23	20	20	21	100
Customer 13	21	29	23	23	30	126
Customer 14	28	5	20	21	33	107
Customer 15	27	26	23	23	29	128
Customer 16	21	20	16	15	25	97
Customer 17	-	-	-	-	-	-

Tangibles:

$$\begin{aligned} & (PQ 1) + (PQ 2) + (PQ 3) + (PQ 4) \\ & = 6 + 7 + 7 + 7 \\ & = 27 \end{aligned}$$

Reliability:

$$\begin{aligned} & (PQ 5) + (PQ 6) + (PQ 7) + (PQ 8) + (PQ 9) \\ & = 5 + 5 + 5 + 5 + 5 \\ & = 25 \end{aligned}$$

Responsiveness:

$$\begin{aligned} & (PQ 10) + (PQ 11) + (PQ 12) + (PQ 13) \\ & = 6 + 6 + 7 + 7 \\ & = 26 \end{aligned}$$

Assurance:

$$\begin{aligned} & (\text{PQ 14}) + (\text{PQ 15}) + (\text{PQ 16}) + (\text{PQ 17}) \\ & = 7 + 7 + 7 + 7 \\ & = 28 \end{aligned}$$

Empathy:

$$\begin{aligned} & (\text{PQ 18}) + (\text{PQ 19}) + (\text{PQ 20}) + (\text{PQ 21}) + (\text{PQ 22}) \\ & = 5 + 7 + 7 + 6 + 6 \\ & = 31 \end{aligned}$$

TOTAL:

$$\begin{aligned} & (\text{Tangibles}) + (\text{Reliability}) + (\text{Responsiveness}) + (\text{Assurance}) + (\text{Empathy}) \\ & = 27 + 25 + 26 + 28 + 31 \\ & = 137 \end{aligned}$$

Table 5.3 shows the SERVQUAL calculated scores for each customer. These calculated scores include the five individual dimension scores, plus the SERVQUAL Un-weighted and Weighted scores.

Table 5.3: SERVQUAL Calculated Scores for Customers at Dealership C

DEALERSHIP C							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	-0.75	0.80	1.00	1.00	1.40	0.69	0.85
Customer 2	-4.75	-5.40	-5.50	-5.50	-5.00	-5.23	-5.35
Customer 3	-0.25	0.40	0.00	0.00	0.40	0.11	0.06
Customer 4	0.25	-5.20	-5.50	-5.00	-4.80	-4.05	-5.03
Customer 5	-0.25	-0.40	-0.25	0.25	-0.60	-0.25	-0.35
Customer 6	-0.25	0.00	0.00	0.00	0.20	-0.01	-0.02
Customer 7	-0.25	0.20	0.00	0.00	-0.20	-0.05	0.06
Customer 8	-1.50	-1.20	-0.50	-0.75	-1.60	-1.11	-1.13
Customer 9	-1.25	-0.80	-1.50	-2.50	-2.00	-1.61	-1.28
Customer 10	-0.75	-2.40	-2.25	-1.50	-2.00	-1.78	-1.94
Customer 11	-0.25	-2.00	-1.25	-0.50	0.00	-0.80	-0.88
Customer 12	-1.25	-2.40	-2.00	-2.00	-2.80	-2.09	-2.17
Customer 13	-0.50	-0.60	-0.50	-0.25	0.20	-0.33	-0.43
Customer 14	0.00	-6.00	-2.00	-1.75	-0.40	-2.03	-3.02
Customer 15	1.00	-1.80	-1.00	-1.00	-1.20	-0.80	-1.22
Customer 16	-1.75	-3.00	-3.00	-3.25	-2.00	-2.60	-2.79
Customer 17	-	-	-	-	-	-	-
Average	-0.78	-1.86	-1.52	-1.42	-1.28	-1.37	-1.54

To calculate the scores for the individual dimensions, the perception score was subtracted from the corresponding expectation score. This was done for each question pertaining to that specific dimension. The differences were then added together and divided by the number of questions making up the dimension.

Tangibles:

$$\frac{(PQ1 - EQ1) + (PQ2 - EQ2) + (PQ3 - EQ3) + (PQ4 - EQ4)}{4}$$

$$= \frac{(6 - 7) + (7 - 7) + (7 - 7) + (7 - 7)}{4}$$

$$= -0.25$$

Reliability:

$$\frac{(PQ5-EQ5)+(PQ6-EQ6)+(PQ7-EQ7)+(PQ8-EQ8)+(PQ9-EQ9)}{5}$$

$$= \frac{(5-6)+(5-6)+(5-5)+(5-5)+(5-5)}{5}$$

$$= -0.40$$

Responsiveness:

$$\frac{(PQ10-EQ10)+(PQ11-EQ11)+(PQ12-EQ12)+(PQ13-EQ13)}{4}$$

$$= \frac{(6-7)+(6-7)+(7-7)+(7-6)}{4}$$

$$= -0.25$$

Assurance:

$$\frac{(PQ14-EQ14)+(PQ15-EQ15)+(PQ16-EQ16)+(PQ17-EQ17)}{4}$$

$$= \frac{(7-7)+(7-7)+(7-7)+(7-6)}{4}$$

$$= 0.25$$

Empathy:

$$\frac{(PQ18-EQ18)+(PQ19-EQ19)+(PQ20-EQ20)+(PQ21-EQ21)+(PQ22-EQ22)}{5}$$

$$= \frac{(5-7)+(7-7)+(7-7)+(6-7)+(6-6)}{5}$$

$$= -0.60$$

It must be noted that all SERVQUAL and SERVPERF scores were calculated using Microsoft Excel therefore a difference may be found in the calculations shown. This has been attributed to Microsoft Excel carrying the various decimal places throughout all calculations while when doing calculations manually only two decimal places were used.

The Un-weighted SERVQUAL score is then calculated by taking the average of the five calculated dimension scores.

SERVQUAL Un-weighted:

$$\frac{(-0.25) + (-0.40) + (-0.25) + (0.25) + (-0.60)}{5}$$
$$= -0.25$$

The weighted SERVQUAL score is calculated by taking each calculated dimension score and multiplying it by the weighting the customer assigned the dimension in the Importance Weighting section of the survey. These values can be found in Table 4.5. When multiplying the calculated dimension score by the importance weighting, the importance weight must be divided by 100. This converts the weightings to a percentage. It must be noted that if the customer has given each dimension an importance weighting of 20, the un-weighted and weighted SERVQUAL scores will be the same since the customer feels each dimension is as important as the next.

SERVQUAL Weighted:

$$\left(-0.25 \times \frac{5}{100}\right) + \left(-0.40 \times \frac{80}{100}\right) + \left(-0.25 \times \frac{10}{100}\right) + \left(0.25 \times \frac{5}{100}\right) + \left(-0.60 \times \frac{0}{100}\right)$$
$$= -0.345$$
$$= -0.35 \text{ (to two decimals)}$$

Table 5.4 shows a summary of the average dimension and SERVQUAL scores for all 13 dealerships for the above calculations.

Table 5.4: Summary of average SERVQUAL Calculated Scores for Customers at all 13 Dealerships

Average Calculated Scores							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Dealership A	-0.65	-0.89	-0.68	-0.70	-0.43	-0.67	-0.71
Dealership B	-0.40	-1.35	-1.00	-0.93	-0.78	-0.89	-0.99
Dealership C	-0.78	-1.86	-1.52	-1.42	-1.28	-1.37	-1.54
Dealership D	-0.39	-0.84	-0.34	-0.48	-0.44	-0.50	-0.57
Dealership E	-0.26	-0.29	-0.17	-0.13	-0.16	-0.20	-0.20
Dealership F	-0.12	-1.09	-0.77	-0.95	-0.64	-0.71	-0.88
Dealership G	-0.18	-0.70	-0.37	-0.55	-0.54	-0.47	-0.60
Dealership H	-0.42	-0.95	-0.40	-0.83	-0.73	-0.67	-0.73
Dealership I	-0.08	-0.50	-0.35	-0.34	-0.37	-0.33	-0.39
Dealership J	0.28	-0.86	-0.45	-0.41	-05.0	-0.39	-0.52
Dealership K	0.05	-0.62	-0.41	-0.43	-0.49	-0.38	-0.43
Dealership L	0.00	-0.39	-0.37	-0.39	-0.38	-0.31	-0.37
Dealership M	-0.33	-0.68	-0.67	-0.62	-0.42	-0.54	-0.55

Table 5.5 shows the SERVPERF calculated scores for each customer. These calculated scores include the five dimension scores and the SERVPERF Un-weighted and Weighted scores. In order to calculate the scores for the individual dimensions only the perception scores for each dimension are taken and summed together and then divided by the number of questions for the specific dimension. This is done for each of the five dimensions.

Table 5.5: SERVPERF Calculated Scores for Customers at Dealership C

DEALERSHIP C							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	5.25	6.80	7.00	7.00	7.00	6.61	6.77
Customer 2	2.25	1.60	1.50	1.50	1.80	1.73	1.64
Customer 3	6.75	7.00	7.00	7.00	7.00	6.95	6.96
Customer 4	5.00	1.00	1.50	2.00	2.20	2.34	1.32
Customer 5	6.75	5.00	6.50	7.00	6.20	6.29	5.34
Customer 6	5.25	5.80	6.25	5.75	6.00	5.81	5.80
Customer 7	6.50	7.00	7.00	7.00	6.40	6.78	6.83
Customer 8	3.00	5.80	6.50	6.25	5.40	5.39	5.88
Customer 9	4.75	6.00	5.00	4.50	4.60	4.97	5.39
Customer 10	5.00	4.60	4.75	5.00	5.00	4.87	4.84
Customer 11	5.75	5.00	5.50	5.75	6.00	5.60	5.58
Customer 12	4.00	4.60	5.00	5.00	4.20	4.56	4.66
Customer 13	5.25	5.80	5.75	5.75	6.00	5.71	5.75
Customer 14	7.00	1.00	5.00	5.25	6.60	4.97	3.99
Customer 15	6.75	5.20	5.75	5.75	5.80	5.85	5.58
Customer 16	5.25	4.00	4.00	3.75	5.00	4.40	4.21
Customer 17	-	-	-	-	-	-	-
Average	5.28	4.76	5.25	5.27	5.33	5.18	5.03

Tangibles:

$$\frac{(PQ1) + (PQ2) + (PQ3) + (PQ4)}{4}$$

$$= \frac{(6) + (7) + (7) + (7)}{4}$$

$$= 6.75$$

Reliability:

$$\frac{(PQ5) + (PQ6) + (PQ7) + (PQ8) + (PQ9)}{5}$$

$$= \frac{(5) + (5) + (5) + (5) + (5)}{5}$$

$$= 5.00$$

Responsiveness:

$$\frac{(PQ10)+(PQ11)+(PQ12)+(PQ13)}{4}$$

$$= \frac{(6)+(6)+(7)+(7)}{4}$$

$$= 6.50$$

Assurance:

$$\frac{(PQ14)+(PQ15)+(PQ16)+(PQ17)}{4}$$

$$= \frac{(7)+(7)+(7)+(7)}{4}$$

$$= 7.00$$

Empathy:

$$\frac{(PQ18)+(PQ19)+(PQ20)+(PQ21)+(PQ22)}{5}$$

$$= \frac{(5)+(7)+(7)+(6)+(6)}{5}$$

$$= 6.20$$

The Un-weighted SERVPERF score is then calculated by taking the average of the five calculated dimension scores.

SERVPERF Un-weighted:

$$\frac{(6.25)+(5.00)+(6.50)+(7.00)+(6.20)}{5}$$

$$= 6.29$$

The weighted SERVPERF score is calculated by taking each calculated dimension score and multiplying it by the weighting the customer assigned the dimension in the Importance Weighting section of the questionnaire. These values can be found in Table 4.5. When multiplying the calculated dimension score by the importance weighting, the importance weight must be divided by 100. This converts the weightings to a percentage. Again, it must be noted that if the customer has given each dimension an importance weighting of 20, the un-weighted

and weighted SERVPERF scores will be the same since the customer feels each dimension is as important as the next.

SERVPERF Weighted:

$$\left(6.75 \times \frac{5}{100}\right) + \left(5.00 \times \frac{80}{100}\right) + \left(6.50 \times \frac{10}{100}\right) + \left(7.00 \times \frac{5}{100}\right) + \left(6.29 \times \frac{0}{100}\right) = 5.34$$

Table 5.6 shows a summary of the average dimension and SERVPERF scores for all 13 dealerships for the above calculations.

Table 5.6: Summary of average SERVPERF Calculated Scores for Customers at all 13 Dealerships

Average Calculated Scores							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Dealership A	5.35	5.56	5.68	5.83	5.91	5.67	5.68
Dealership B	5.99	5.37	5.61	5.64	5.69	5.66	5.61
Dealership C	5.28	4.76	5.25	5.27	5.33	5.18	5.03
Dealership D	5.59	5.72	6.16	6.09	5.97	5.91	5.90
Dealership E	6.05	6.41	6.37	6.51	6.45	6.36	6.38
Dealership F	5.75	5.37	5.62	5.45	5.63	5.56	5.45
Dealership G	6.05	5.76	6.09	6.09	6.01	6.00	5.92
Dealership H	5.67	5.64	5.99	5.84	5.78	5.79	5.77
Dealership I	5.92	6.00	6.15	6.23	6.11	6.08	6.06
Dealership J	6.27	5.52	5.93	6.03	5.81	5.91	5.81
Dealership K	6.09	5.92	6.09	6.17	5.98	6.05	6.04
Dealership L	5.95	6.11	6.11	6.17	5.96	6.06	6.07
Dealership M	5.88	5.79	5.77	5.86	5.93	5.85	5.87

Cronbach Alpha

Table 5.7 shows the Cronbach Alpha scores calculated for each dimension. The calculation of the Cronbach Alpha scores was carried out across each dimension, thereby checking the reliability of the data supplied by the customers. Cronbach Alpha scores were calculated for both expectation and perception data.

Table 5.7: Cronbach Alpha Scores for Customers at Dealership C

DEALERSHIP C					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.92	0.81	0.72	0.84	0.85
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.96	0.97	0.92	0.94	0.95

Firstly, the variance of the sub-total scores for each dimension was calculated. The variance for each question making up the dimension was then calculated. Both variances were calculated across all the customers' answers. The variance calculated for each question making up the dimension was then added together. Using equation 1, introduced in Chapter 2, Cronbach's Alpha was then calculated.

Table 5.8: Extracted Cronbach Alpha Results for the Tangibles Dimension for Customers' Expectations from Dealership C

DEALERSHIP C					
Customer	Tangibles				Sub-Total
	EQ1	EQ2	EQ3	EQ4	
Customer 1	6	6	6	6	24
Customer 2	7	7	7	7	28
Customer 3	7	7	7	7	28
Customer 4	4	5	5	5	19
Customer 5	7	7	7	7	28
Customer 6	6	5	5	6	22
Customer 7	6	7	7	7	27
Customer 8	4	4	5	5	18
Customer 9	7	7	5	5	24
Customer 10	6	6	6	5	23
Customer 11	5	6	7	6	24
Customer 12	5	6	5	5	21
Customer 13	6	6	6	5	23
Customer 14	7	7	7	7	28
Customer 15	5	5	7	6	23
Customer 16	7	7	7	7	28
Customer 17	4	4	4	4	16
Variance	1.28	1.13	1.06	0.99	14.32
Sum of variance	4.45				
Cronbach Alpha					0.92

Where:

N = Number of components

= 4

σ_X^2 = Variance of the observed total test scores

= 14.32

$\sigma_{Y_i}^2$ = Variance of component i

= 1.28 (for EQ1); 1.13 (for EQ2); 1.06 (for EQ3) and 0.99 (for EQ4)

Using Equation 14, Cronbach's Alpha can then be calculated:

$$\begin{aligned}\alpha &= \frac{N}{N-1} \left(\frac{\sigma_x^2 - \sum_{i=1}^N \sigma_{y_i}^2}{\sigma_x^2} \right) \\ &= \frac{4}{4-1} \left(\frac{14.32 - (1.28 + 1.13 + 1.06 + 0.99)}{14.32} \right) \\ &= \frac{4}{3} \left(\frac{14.32 - 4.45}{14.32} \right) \\ &= 0.92\end{aligned}$$

Table 5.9 shows a summary of the average Cronbach Alpha calculated scores for both the Expectation and Perception data for all five service quality dimensions.

Table 5.9: Average Cronbach Alpha Calculated Scores for all 13 Dealerships

Average Cronbach Alpha Results										
Dealership	Tangibles		Reliability		Responsiveness		Assurance		Empathy	
	Expectations	Perceptions	Expectations	Perceptions	Expectations	Perceptions	Expectations	Perceptions	Expectations	Perceptions
Dealership A	0.89	0.79	0.81	0.93	0.85	0.90	0.80	0.90	0.75	0.88
Dealership B	0.70	0.83	0.88	0.94	0.85	0.89	0.76	0.92	0.85	0.92
Dealership C	0.92	0.96	0.81	0.97	0.72	0.92	0.84	0.94	0.85	0.95
Dealership D	0.75	0.85	0.91	0.90	0.86	0.97	0.86	0.95	0.87	0.91
Dealership E	0.72	0.88	0.80	0.81	0.77	0.79	0.84	0.84	0.77	0.69
Dealership F	0.66	0.74	0.75	0.96	0.67	0.95	0.65	0.90	0.76	0.96
Dealership G	0.73	0.77	0.92	0.90	0.76	0.82	0.80	0.86	0.78	0.80
Dealership H	0.86	0.84	0.83	0.95	0.77	0.88	0.83	0.92	0.82	0.85
Dealership I	0.79	0.80	0.89	0.89	0.88	0.86	0.86	0.92	0.90	0.87
Dealership J	0.88	0.91	0.94	0.92	0.91	0.88	0.91	0.90	0.93	0.89
Dealership K	0.81	0.76	0.89	0.92	0.76	0.81	0.88	0.89	0.80	0.88
Dealership L	0.86	0.88	0.84	0.94	0.80	0.90	0.81	0.91	0.88	0.90
Dealership M	0.71	0.75	0.87	0.88	0.77	0.86	0.81	0.93	0.88	0.90

5.2.2 Employees

Tables 5.10 to 5.13 show the calculated results for the employees from Dealership C for their expectation and perception scores and their SERVQUAL and SERVPERF scores. The method used to calculate the scores for the employees is the same as the method used to calculate the scores for the customers.

Table 5.10: Expectation Sub-Total Scores for Employees at Dealership C

DEALERSHIP C						
Expectation Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	24	33	28	28	33	146
Employee 2	26	33	28	28	34	149
Employee 3	25	32	27	27	35	146
Employee 4	23	35	27	27	34	146

Table 5.11: Perception Sub-Total Scores for Employees at Dealership C

DEALERSHIP C						
Perception Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	23	35	28	28	35	149
Employee 2	23	30	27	28	35	143
Employee 3	26	31	27	27	35	146
Employee 4	15	22	23	19	26	105

Table 5.12: SERVQUAL Calculated Scores for Employees at Dealership C

DEALERSHIP C							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-0.25	0.40	0.00	0.00	0.40	0.11	0.11
Employee 2	-0.75	-0.60	-0.25	0.00	0.20	-0.28	-0.23
Employee 3	0.25	-0.20	0.00	0.00	0.00	0.01	0.01
Employee 4	-2.00	-2.60	-1.00	-2.00	-1.60	-1.84	-2.11
Average	-0.69	-0.75	-0.31	-0.50	-0.25	-0.50	-0.56

Table 5.13: SERVPERF Calculated Scores for Employees at Dealership C

DEALERSHIP C							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	5.75	7.00	7.00	7.00	7.00	6.75	6.75
Employee 2	5.75	6.00	6.75	7.00	7.00	6.50	6.60
Employee 3	6.50	6.20	6.75	6.75	7.00	6.64	6.64
Employee 4	3.75	4.40	5.75	4.75	5.20	4.77	4.72
Average	5.44	5.90	6.56	6.38	6.55	6.17	6.18

The employee results relating to the other 12 dealerships can be found in Appendix J. However, a summary of the average calculated scores for both SERVQUAL and SERVPERF for the employees across all 13 dealerships can be found in Table 5.14 and 5.15. These results were calculated using the same method as those used for the customers results.

Table 5.14: Summary of average SERVQUAL Calculated Scores for Employees at all 13 Dealerships

Average Calculated Scores							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Dealership A	-0.75	-0.35	-0.19	-0.34	-0.08	-0.34	-0.30
Dealership B	-0.52	-1.23	-0.73	-0.98	-0.42	-0.78	-0.77
Dealership C	-0.69	-0.75	-0.31	-0.50	-0.25	-0.50	-0.56
Dealership D	-0.47	-0.65	-0.59	-0.81	-0.53	-0.61	-0.60
Dealership E	-0.33	-0.07	-0.08	0.08	0.00	-0.08	-0.11
Dealership F	-0.36	-0.66	-0.75	-0.82	-0.23	-0.56	-0.62
Dealership G	-0.10	-0.08	-0.10	-0.10	0.00	-0.08	-0.08
Dealership H	-1.58	-0.07	-0.83	-1.17	-0.40	-0.81	-0.83
Dealership I	-0.30	-0.72	-0.40	-0.50	-0.24	-0.43	-0.48
Dealership J	0.29	0.00	-0.11	0.14	0.31	0.13	0.10
Dealership K	-0.31	-0.33	-0.44	-0.22	-0.04	-0.27	-0.28
Dealership L	-1.70	-0.76	-0.35	-0.80	0.08	-0.71	-0.67
Dealership M	-0.15	0.04	0.00	-0.15	-0.32	-0.12	-0.08

Table 5.15: Average SERVPERF Calculated Scores for Employees for all 13 Dealerships

DEALERSHIP C							
Calculated Scores							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Dealership A	5.38	6.28	6.22	6.38	6.48	6.14	6.20
Dealership B	6.10	5.15	5.60	5.69	6.03	5.71	5.72
Dealership C	5.44	5.90	6.56	6.38	6.55	6.17	6.18
Dealership D	6.19	6.00	6.16	6.03	6.20	6.12	6.11
Dealership E	6.25	6.60	6.75	6.92	6.60	6.62	6.55
Dealership F	6.25	5.80	6.04	6.00	6.40	6.10	6.04
Dealership G	6.75	6.64	6.70	6.65	6.76	6.70	6.70
Dealership H	4.92	6.53	5.92	5.67	6.60	5.93	5.93
Dealership I	6.15	6.24	6.35	6.50	6.64	6.38	6.35
Dealership J	5.89	5.97	6.00	6.29	6.37	6.10	6.53
Dealership K	5.72	6.04	6.11	6.28	6.31	6.09	6.15
Dealership L	5.00	5.84	6.20	6.00	6.48	5.90	5.96
Dealership M	6.50	6.20	6.50	6.25	6.60	6.41	6.42

5.3 Financial Results

In this section sample calculations as to how the gross profit gained from the customer's service will be shown. The data used in the sample calculations to follow, all appears in Table 4.11. Once again all the data for the other 12 dealerships can be found in Appendix H.

Firstly, the Total Sales were calculated by adding together the total for the "Service Labour Sales" and "Service Other Sales". The "Service Labour Sales" are made up of Customer Labour Sales; Customer Labour Warranty; Customer Sales Internal and Customer Sales Other. The "Service Other Sales" are made up of supply, material and consumables; sublet and outwork; own orders; oil and grease; sundry sales, tyres and tubes.

Total Sales

$$\begin{aligned}
 &= \text{Service Labour Sales} + \text{Service Other Sales} \\
 &= (1493 + 368 + 149 + 0) + (89 + 144 + 0 + 135 + 0 + 0) \\
 &= 2010 + 368 \\
 &= 2378
 \end{aligned}$$

Secondly, the Total Costs were calculated by adding together the “Service Labour Costs”, “Service Other Costs” and “Idle Time”. The “Service Labour Costs” are made up of Labour Costs for Customers; Labour Costs for Warranty; Labour Costs for Internal and Labour Costs for Other. The “Service Other Costs” are made up from Supply, Material and Consumable Costs; Sublet and Outwork Costs; Own Orders Costs; Oil and Grease Costs; Additive Costs; Tyres and Tubes Costs; Cleaning Costs for In-house; Cleaning Costs for Sub-contractors and Other Part Makes.

Total Costs

$$\begin{aligned}
 &= \text{Service Labour Costs} + \text{Service Other Costs} + \text{Idle Time} \\
 &= (193 + 0 + 0 + 0) + (9 + 116 + 0 + 91 + 0 + 0 + 0 + 146 + 0) + 136 \\
 &= 193 + 362 + 136 \\
 &= 691
 \end{aligned}$$

The Gross Profit on customer labour was then calculated by subtracting the labour costs for the customer from the labour sales for the customer.

Gross Profit Customer Labour

$$\begin{aligned}
 &= \text{Labour Sales Customer} - \text{Labour Costs Customer} \\
 &= 1493 - 193 \\
 &= 1300
 \end{aligned}$$

The percentage gross profit of customer labour sales was then calculated by taking the gross profit calculated in the equation above and dividing it by the customer labour sales.

% Gross Profit of Customer Labour

$$\begin{aligned}
 &= \frac{\text{Gross Profit Customer Labour}}{\text{Labour Sales Customer}} \\
 &= \frac{1300}{1493} \\
 &= 0.8707
 \end{aligned}$$

When calculating the “Other Gross Profit” value the “Service Other Costs” were subtracted from the “Service Other Sales”.

Other Service Gross Profit

$$\begin{aligned}
 &= \text{Service Other Sales} - \text{Service Other Costs} \\
 &= 368 - 362 \\
 &= 6
 \end{aligned}$$

The percentage gross profit of "Service Other Sales" was then calculated by taking the gross profit calculated in the equation above and dividing it by the "Service Other Sales".

% Gross Profit of Other Service Sales

$$\begin{aligned}
 &= \frac{\text{Other Service Gross Profit}}{\text{Service Other Sales}} \\
 &= \frac{6}{368} \\
 &= 0.0163
 \end{aligned}$$

All the above calculations have been summarised in Table 5.16 below.

Table 5.16: Calculated Financial Scores for Dealership C

DEALERSHIP C			
SALES		COST OF SALES	
Service Labour Sales	2010	Service Labour Costs	193
Service Other Sales	368	Service Other Costs	362
		Idle Time	136
TOTAL SALES	2378	TOTAL COSTS	691
GROSS PROFIT			
Customer Labour		1300	
% Gross Profit of Customer Labour Sales		0.8707	
Other		6	
% Gross Profit of Other Service Sales		0.0163	

Table 5.17 shows a summary of the calculated Gross Profit results for all 13 dealerships.

Table 5.17: Summary of calculated Financial Scores at all 13 Dealerships

Calculated Financial Results				
Dealership	Customer Labour	% Gross Profit of Customer Labour Sales	Other	% Gross Profit of Other Service Sales
Dealership A	3007	0.9044	360	0.2716
Dealership B	4761	0.7753	565	0.3116
Dealership C	1300	0.8707	6	0.0163
Dealership D	2048	0.5955	1633	0.3126
Dealership E	1847	0.7699	192	0.2154
Dealership F	1688	0.7439	268	0.1776
Dealership G	3275	0.8129	542	0.2517
Dealership H	220	0.8655	325	0.3841
Dealership I	3681	0.7738	244	0.1643
Dealership J	5247	0.6901	592	0.3452
Dealership K	2846	0.4707	111	0.0902
Dealership L	891	0.4514	173	0.1184
Dealership M	1712503	0.7893	233063	0.2352

5.4 Statistical Analysis

5.4.1 Introduction

In this section the various statistical tests performed during this research will be introduced. For each test performed an explanation of the procedure used as well as sample calculations will be presented. All results and figures will be discussed further in the chapter to follow.

It must be noted that for all statistical tests performed during this research a 5% level of significance was chosen.

5.4.2 Data Distribution

In this section the distribution of the data to be used in the statistical analysis will be analysed first. This will allow one to see whether or not there is any bias in the data as well as make any assumptions about the data. When plotting the bar charts below the SERVQUAL and SERVPERF

un-weighted and weighted scores were used. Table 5.18 shows the data classes and the number of customers and employees in each class for the SERVQUAL un-weighted scores for all 13 dealerships. Figure 5.1 represents the data for the customers; while Figure 5.2 represents the data for the employees. The complete data set for the customers and employees in their class categories for SERVQUAL weighted and SERVPERF un-weighted and weighted scores can be found in Appendix K. The data used to generate Table 5.18 can be found in Appendices I and J in Columns 7 and 8 in the various SERVQUAL and SERVPERF calculated score tables for each dealership. The columns are named "SERVQUAL SCORE" Un-weighted and weighted or "SERVPERF SCORE" Un-weighted and weighted.

Table 5.18: Data Classes for Complete SERVQUAL Un-weighted scores across all 13 Dealerships

Classes	Customers	Employees
Less than -4.00	6	0
Between -3.99 and -3.00	4	0
Between -2.99 and -2.00	21	3
Between -1.99 and -1.00	74	10
Between -0.99 and 0.00	232	50
Between 0.01 and 1.00	115	18
Larger than 1.01	4	1
TOTAL	456	82

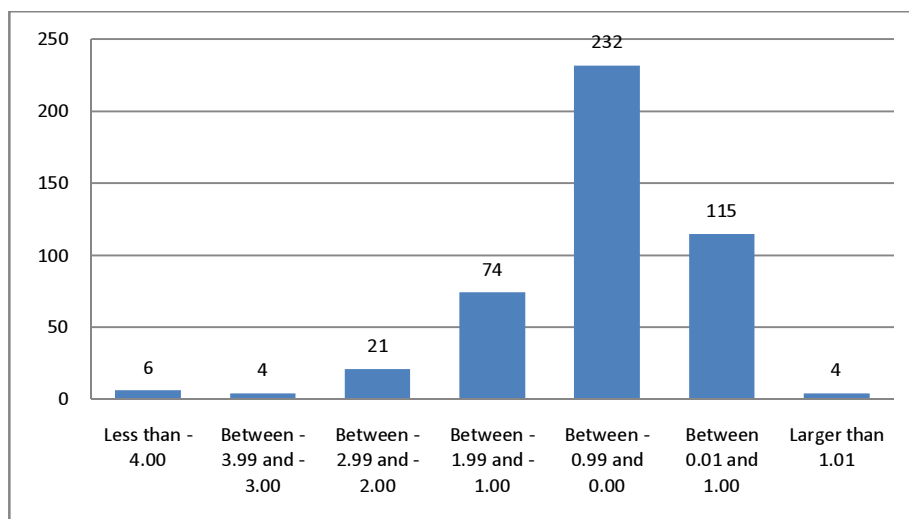


Figure 5.1: Customer Classes for SERVQUAL Un-weighted scores across all 13 Dealerships

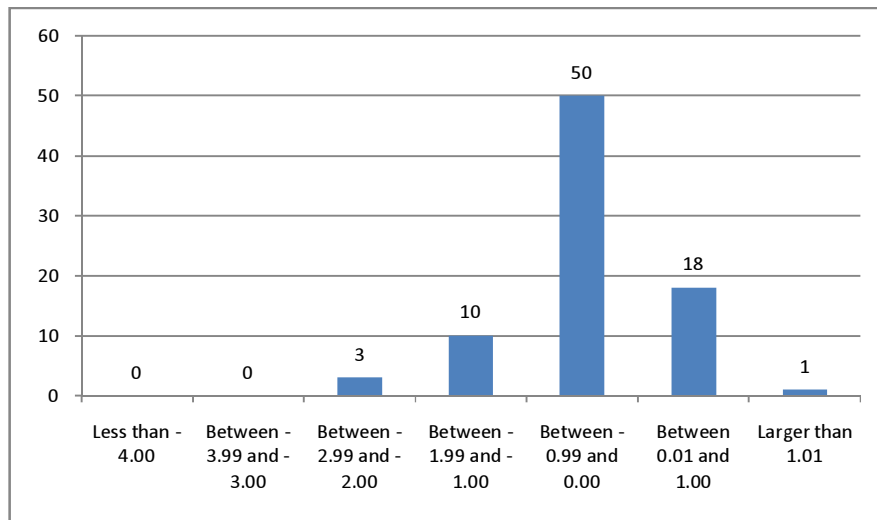


Figure 5.2: Employee Classes for SERVQUAL Un-weighted scores across all 13 Dealerships

From the above charts and those in Appendix K it can be noted that the data appears to be slightly bias or skewed. The bias or ‘skewness’ can be measured or quantified using equation 15 (Wegner, 2008):

$$\text{Skewness} = \frac{3(\text{Mean} - \text{Median})}{\text{Standard Deviation}} \quad (\text{Wegner, 2008}) \quad (15)$$

Table 5.19 shows the results of the calculated ‘skewness’ for the data represented in Figures 5.1 and 5.2, as well as the data in Appendix K.

Table 5.19: Calculated ‘Skewness’ for SERVQUAL and SERVPERF Data

	SERVQUAL SCORE	SERVQUAL SCORE	SERVPERF SCORE	SERVPERF SCORE
	Un-weighted	Weighted	Un-weighted	Weighted
Customer				
Mean	-0.54	-0.62	5.88	5.85
Median	-0.31	-0.36	6.00	6.00
Standard Deviation	0.95	1.05	0.90	0.98
Skewness	-0.73	-0.73	-0.39	-0.47
Employee				
Mean	-0.42	-0.43	6.12	6.16
Median	-0.23	-0.22	6.30	6.28
Standard Deviation	0.68	0.70	0.71	0.82
Skewness	-0.87	-0.88	-0.73	-0.42

From Table 5.13 it can be seen that all calculated 'skewness' values fall between -1 and +1. This is referred to as Moderate skewness (Wegner, 2008, p. 134). Based on the fact that the data is only moderately skewed, the assumption that the data is normally distributed was made. It must also be noted that all the calculated 'skewness' values are negative therefore the distribution of data is moderately skewed to the left and that there are a few low-valued outliers.

5.4.3 Financial Results

To test whether or not a relationship between service quality and the financial measure calculated in this research exists, a multiple linear regression model will be used. A multiple linear regression model was chosen as both the independent (SERVQUAL and SERVPERF dimension scores) and dependent (measure of profit) variables in this research are continuous. As mentioned above, it was assumed that the data was normally distributed. However, a test will be performed to investigate whether the population's means are equal. During this examination only the dimension scores of SERVQUAL and SERVPERF were taken into consideration as both the weighted and un-weighted scores are derived from the five individual dimension scores.

When performing the multiple linear regression model a statistical program called R was used. The data employed while running the multiple linear regression model between the SERVQUAL and SERVPERF dimension scores and the Percentage Gross Profit of Customer Labour Sales are presented in Tables 5.20 and 5.21. The results, as given by R, of the two multiple linear regression models are demonstrated in Table 5.22 and 5.23.

Table 5.20: Summary of SERVQUAL Data for Multiple Linear Regression Model

SERVQUAL DATA							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	% GP Customer Labour Sales	% GP Other Service Sales
A	-0.65	-0.89	-0.68	-0.70	-0.43	0.9044	0.2716
B	-0.40	-1.35	-1.00	-0.93	-0.78	0.7753	0.3116
C	-0.78	-1.86	-1.52	-1.42	-1.28	0.8707	0.0163
D	-0.39	-0.84	-0.34	-0.48	-0.44	0.5955	0.3126
E	-0.26	-0.29	-0.17	-0.13	-0.16	0.7699	0.2154
F	-0.12	-1.09	-0.77	-0.95	-0.64	0.7439	0.1776
G	-0.18	-0.70	-0.37	-0.55	-0.54	0.8129	0.2517
H	-0.42	-0.95	-0.40	-0.83	-0.73	0.8655	0.3841
I	-0.08	-0.50	-0.35	-0.34	-0.37	0.7738	0.1643
J	0.28	-0.86	-0.45	-0.41	-0.50	0.6901	0.3452
K	0.05	-0.62	-0.41	-0.43	-0.49	0.4707	0.0902
L	0.00	-0.39	-0.37	-0.39	-0.38	0.4514	0.1184
M	-0.33	-0.68	-0.67	-0.62	-0.42	0.7893	0.2352

Table 5.21: Summary of SERVPERF Data for Multiple Linear Regression Model

SERVPERF DATA							
Dealership	Tangibles	Reliability	Responsiveness	Assurance	Empathy	% GP Customer Labour Sales	% GP Other Service Sales
A	5.35	5.56	5.68	5.83	5.91	0.9044	0.2716
B	5.99	5.37	5.61	5.64	5.69	0.7753	0.3116
C	5.28	4.76	5.25	5.27	5.33	0.8707	0.0163
D	5.59	5.72	6.16	6.09	5.97	0.5955	0.3126
E	6.05	6.41	6.37	6.51	6.45	0.7699	0.2154
F	5.75	5.37	5.62	5.45	5.63	0.7439	0.1776
G	6.05	5.76	6.09	6.09	6.01	0.8129	0.2517
H	5.67	5.64	5.99	5.84	5.78	0.8655	0.3841
I	5.92	6.00	6.15	6.23	6.11	0.7738	0.1643
J	6.27	5.52	5.93	6.03	5.81	0.6901	0.3452
K	6.09	5.92	6.09	6.17	5.98	0.4707	0.0902
L	5.95	6.11	6.11	6.17	5.96	0.4514	0.1184
M	5.88	5.79	5.77	5.86	5.93	0.7893	0.2352

When interpreting the results given by R one looks at the probability value, labelled Pr ($>|t|$), which appears in column 5 of the generated results. This value allows one to test the null hypothesis versus the alternate hypothesis. The null hypothesis tests if the variable (one of the

five quality dimensions) is insignificant i.e. $\beta = 0$, where β represents the correlation between SERVQUAL and SERVPERF dimensions and Percentage Gross Profit of Customer Labour Sales. The alternate hypothesis tests when the tested variable (one of the five quality dimensions) is significant. To test the null hypothesis, one needs to determine whether the independent variable lies in the rejection region. If so, one can then reject the null hypothesis therefore implying that any one of the above SERVQUAL or SERVPERF dimension scores may have a relationship with Percentage Gross Profit of Customer Labour Sales.

In Table 5.22 it can be seen that none of the SERVQUAL dimension scores were found to be significant. This can be seen by the fact that none of the dimension scores were signalled as significant by R. One can verify whether the dimension scores are significant by checking if the value for Pr ($>|t|$) is less than 0.05, as this will indicate that the variable will lie within the 5% rejection region. If one looks at the results for the SERVPERF dimensions, Table 5.23, it can be seen that the Empathy dimension was found to be significant for a 5% level of significance. This is indicated by the asterisk (*) to the right of the number. None of the other dimension were found to be significant.

Table 5.22: Multiple Linear Regression Model results for the SERVQUAL dimensions

Coefficients:	Estimate	Std. Error	t value	Pr ($> t $)
(Intercept)	0.62530	0.09655	6.476	0.000342 ***
Tangibles	-0.24501	0.19390	-1.264	0.246834
Reliability	-0.17862	0.37383	-0.478	0.647337
Responsiveness	0.13622	0.30542	0.446	0.669062
Assurance	-0.21992	0.47211	-0.466	0.655494
Empathy	0.30234	0.51671	0.585	0.576825

Table 5.23: Multiple Linear Regression Model results for the SERVPERF dimensions

Coefficients:	Estimate	Std. Error	t value	Pr ($> t $)
(Intercept)	-0.62323	1.41181	-0.441	0.6722
Tangibles	-0.02516	0.14824	-0.170	0.8700
Reliability	-0.52848	-0.52848	0.29993	-1.762
Responsiveness	0.03587	0.38856	0.092	0.9290
Assurance	-0.56642	0.46862	-1.209	0.2660
Empathy	1.30036	0.50199	2.590	0.0359 *

A sample calculation of the t-value calculated in Table 5.23 for the Empathy dimension will now be demonstrated:

Null hypothesis: $\beta = 0$

(The hypothesis is accepted and there is no correlation found between the SERVQUAL or SERVPERF dimensions and Percentage Gross Profit of Customer Labour Sales)

Alternate hypothesis: $\beta \neq 0$

(The hypothesis is rejected and there is a correlation found between the SERVQUAL or SERVPERF dimensions and Percentage Gross Profit of Customer Labour Sales)

Level of significance: $\alpha = 0.05$

Criterion: Reject the null hypothesis if $t < -2.201$ or $t > 2.201$, where 2.201 is the value of $t_{0.025}$ for $13 - 2 = 11$ degrees of freedom.

Calculation:
$$t_{stat} = \frac{\bar{X} - \mu_0}{\frac{s}{\sqrt{n}}}$$

Where:

\bar{X} is the sample mean

μ_0 is the population mean

s is the sample standard deviation

n is the sample size

With the above formula, R then calculated the value for t_{stat} to be 2.590.

Decision: Since $t = 2.590$ exceeds 2.201, the null hypothesis must be rejected and therefore we can conclude that there is a relationship between Empathy in the SERVPERF model and Percentage Gross Profit Customer Labour Sales.

Chapter 6 will continue and include a detailed discussion of the entire set of results.

5.4.4 Customer Employee Score Comparison

Statistical tests for the comparison of the customer and employee dimension scores and overall service quality scores for both the SERVQUAL (Table 5.24) and SERVPERF (Table 5.25) data sets will be performed. To undertake this comparison an *F-test* was performed between the two sets of data. The first data set being that generated by the customers while the second was that obtained from the employees. The customer sample included only those who had completed the entire survey (Sections 1 to 4); while all employees interviewed during this research were included in the sample.

An F-test was performed in order to determine whether the variances of the two populations were equal. If no significant difference between the customer and employee scores was found H_0 was accepted and a t-test was then performed to confirm whether the population means were equal. If the variances of the two populations were not equal, H_0 was not accepted implying that there was a significant difference between the customer and employee scores.

Table 5.24: Customer-Employee Gap for SERVQUAL Data

Customers (1)	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL Un-weighted	SERVQUAL Weighted
Mean	-0.20	-0.83	-0.56	-0.59	-0.53	-0.54	-0.62
Standard Deviation	0.94	1.33	1.13	1.10	1.03	0.95	1.05
Variance	0.89	1.76	1.29	1.21	1.05	0.89	1.10
Sample Size	456.00	456.00	456.00	456.00	456.00	456.00	456.00
<i>df (Degrees of Freedom)</i>	455.00	455.00	455.00	455.00	455.00	455.00	455.00
Employees (2)	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL Un-weighted	SERVQUAL Weighted
Mean	-0.48	-0.52	-0.41	-0.51	-0.18	-0.42	-0.43
Standard Deviation	0.91	0.92	0.79	0.87	0.71	0.68	0.70
Variance	0.83	0.84	0.62	0.76	0.51	0.46	0.49
Sample Size	82.00	82.00	82.00	82.00	82.00	82.00	82.00
<i>df (Degrees of Freedom)</i>	81.00	81.00	81.00	81.00	81.00	81.00	81.00
<i>F-stat</i>	1.06	2.09	2.06	1.59	2.08	1.96	2.23
<i>F-crit</i>	1.341	1.341	1.341	1.341	1.341	1.341	1.341
H_0 Accepted or Rejected	Accept	Reject	Reject	Reject	Reject	Reject	Reject

The data in Columns 7 and 8 in the Customers and Employees Calculated Scores Tables in Appendices I and J was the data used to calculate the mean, standard deviation and variance shown in Table 5.24 and 5.25. This was, again, achieved by using the available math functions in Microsoft Excel. Once these values had been calculated, the *F-stat* value could then be calculated and compared to the *F-crit* value.

The *F-crit* value is read from the Statistical Tables for an *F-test* with the use of the degrees of freedom (*df*) for both samples 1 and 2 which relate to the customers and employees respectively. With the use of this critical value one can then decide whether or not to accept or reject the hypothesis. A sample of how the *F-stat* value is calculated for the Tangibles dimension shown in Table 5.18 is given below.

- Null hypothesis: $\sigma_{C(1)} = \sigma_{E(2)}$
 (The hypothesis is accepted therefore there is no significant difference between the customer and employee score.)
- Alternate hypothesis: $\sigma_{C(1)} > \sigma_{E(2)}$
 (The hypothesis is rejected therefore there is a significant difference between the customer and employee score.)
- Level of significance: $\alpha = 0.05$
- Criterion: Reject the null hypothesis if $F_{stat} > 1.341$, where 1.341 is the value of F_{crit} for $df_1 = 455$ and $df_2 = 81$ degrees of freedom.
- Calculation: $F_{stat} = \frac{s_1^2}{s_2^2} = \frac{(0.94)^2}{(0.91)^2} = \frac{0.89}{0.83} = 1.06$
- Decision: Since $F_{stat} = 1.06$ and is less than 1.341 one can accept the null hypothesis and there is no significant difference between the Tangibles scores for the customers and employees.

From the above result it can be seen that H_0 was accepted for the Tangibles dimension only. Therefore a *t-test* will now be performed to check whether the population means may be assumed to be equal, using the formula below.

$$t_{stat} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{1/n_1 + 1/n_2} \sqrt{[(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2] / (n_1 + n_2 - 2)}} \quad (\text{Gryna, 2001}) \quad (16)$$

Level of significance: $\alpha = 0.05$

Criterion: $t_{crit} = 1.645$ for $df = n_1 + n_2 - 2$

Calculation: $t_{stat} = \frac{-0.20 - (-0.48)}{\sqrt{1/456 + 1/82} \sqrt{[(456 - 1)0.89 + (82 - 1)0.83] / (456 + 82 - 2)}} = 2.470$

Decision: Since $t_{stat} = 2.470$ and is greater than t_{crit} at 1.645 it can be stated that the population means are not equal.

A discussion of the entire set of results will follow in the next chapter.

Table 5.25: Customer-Employee Gap for SERVPERF Data

Customers (1)	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF Un-weighted	SERVPERF Weighted
Mean	5.90	5.70	5.92	5.97	5.91	5.88	5.85
Standard Deviation	0.86	1.22	1.06	1.03	0.97	0.90	0.98
Variance	0.74	1.49	1.12	1.05	0.95	0.82	0.96
Sample Size	456.00	456.00	456.00	456.00	456.00	456.00	456.00
<i>df (Degrees of Freedom)</i>	455.00	455.00	455.00	455.00	455.00	455.00	455.00
Employees (2)	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF Un-weighted	SERVPERF Weighted
Mean	5.92	5.97	6.15	6.17	6.39	6.12	6.16
Standard Deviation	1.00	0.89	0.82	0.81	0.66	0.71	0.82
Variance	0.99	0.80	0.68	0.66	0.43	0.51	0.67
Sample Size	82.00	82.00	82.00	82.00	82.00	82.00	82.00
<i>df (Degrees of Freedom)</i>	81.00	81.00	81.00	81.00	81.00	81.00	81.00
<i>F-stat</i>	0.74	1.87	1.65	1.60	2.20	1.60	1.43
<i>F-crit</i>	1.341	1.341	1.341	1.341	1.341	1.341	1.341
H ₀ Accepted or Rejected	Accept	Reject	Reject	Reject	Reject	Reject	Reject

The same method was also used to calculate the results for the SERVPERF data set in Table 5.25 above.

From the above result it can be seen that H₀ was accepted for the Tangibles dimension only. Therefore a *t-test* will now be performed to check whether the population means may be assumed to be equal.

Level of significance: $\alpha = 0.05$

Criterion: $t_{crit} = 1.645$ for $df = n_1 + n_2 - 2$

Calculation: $t_{stat} = \frac{5.90 - 5.92}{\sqrt{1/456 + 1/82} \sqrt{[(456 - 1) 0.74 + (82 - 1) 0.99] / (456 + 82 - 2)}} = 0.189$

Decision: Since $t_{stat} = 0.189$ and is less than t_{crit} at 1.645 it can be stated that the population means are equal.

In Figure 5.3 the actual measured gap/difference between the customer and employee score for the Reliability dimension for the SERVPERF model is illustrated. A Figure for each dimension for both SERVQUAL and SERVPERF of the actual measured gap/difference between the customer and employee can be found in Appendix L. The significance of each graph will be illustrated in Chapter 6.

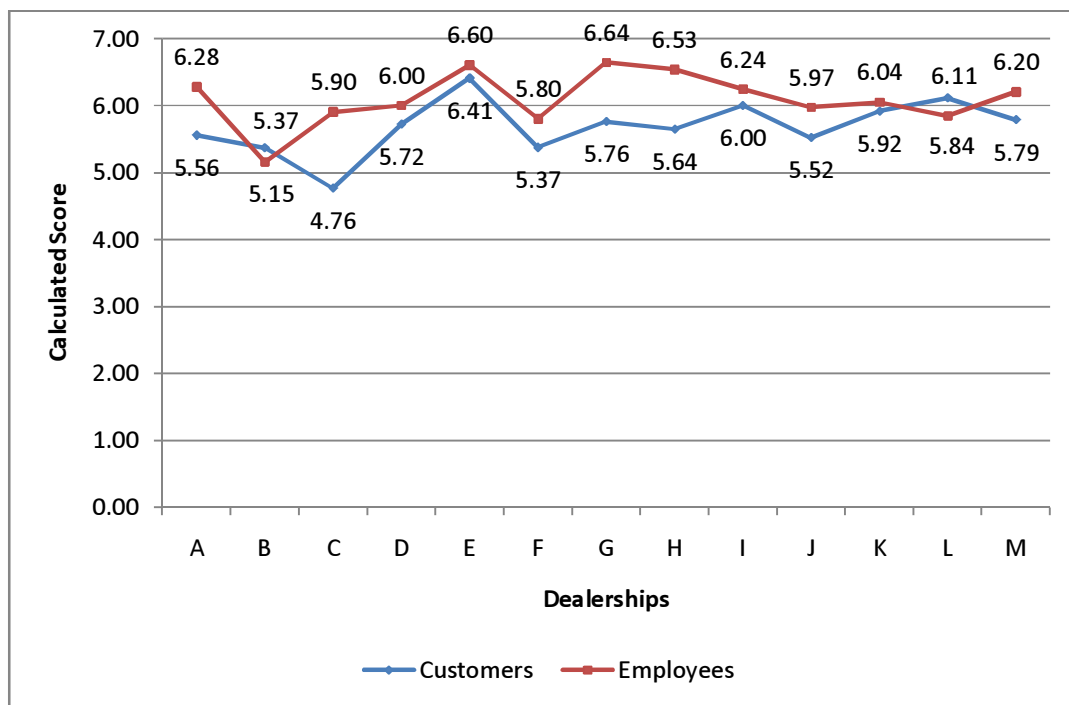


Figure 5.3: Customer-employee Score Comparison for SERVPERF Reliability Dimension

5.4.5 Customer Industry Type Comparison

In this section, the type of industry within which a customer has been involved will be compared to his or her SERVQUAL and SERVPERF weighted and un-weighted scores. In other words

whether or not a customer has experience within the service industry will be investigated. To determine whether or not a customer has worked in the service industry (and subsequently the sample size for each group), the answer to Question 4 (“Do you work in the service industry?”) from Section 1 of the survey, will be investigated. The data used to conduct the test and generate the results shown below can be found in Column 4 of the Personal Details Tables for the Customers in Appendix F. The column has been labeled “Service Industry (Y/N)”.

Table 5.26 shows the sample size for the two sets of customers which will be used in this part of the statistical analysis. In this test only the customers who completed the survey were included as part of the sample as they had completed the full survey and as a consequence their input was considered more valid.

Table 5.26: Classification of Customer

Customer Classifications for Customer Industry Type Test							
Dealership	Yes (1)	No (2)	TOTAL	Dealership	Yes (1)	No (2)	TOTAL
Dealership A	15	22	37	Dealership H	7	16	23
Dealership B	31	28	59	Dealership I	26	28	54
Dealership C	9	7	16	Dealership J	31	27	58
Dealership D	13	15	28	Dealership K	16	43	59
Dealership E	9	10	19	Dealership L	7	14	21
Dealership F	7	8	15	Dealership M	9	24	33
Dealership G	13	21	34	TOTAL	193	263	456

Tables 5.27 and 5.28 show the results of the *F*-test for SERVQUAL un-weighted and weighted; while Tables 5.29 and 5.30 show the results of the *F*-test for SERVPERF un-weighted and weighted. The same formulas as those in the previous statistical test for the Customer Employee Score Comparison were again used for the hypothesis tests below.

After filtering the data into the correct categories (SERVQUAL un-weighted and weighted and SERVPERF un-weighted and weighted) the mean, standard deviation and variance of the two samples (customers who did and did not work in the service industry) were calculated using the mathematics function in Microsoft Excel. After having calculated these values the *F*-stat and *F*-crit values for the various data sets could be calculated. The sample calculations for the SERVQUAL Un-weighted data set is illustrated below.

- Null hypothesis: $\sigma_{Y(1)} = \sigma_{N(2)}$
 (The hypothesis is accepted, therefore there is no significant difference between the scores of the customer's who do and do not work in the service industry.)
- Alternate hypothesis: $\sigma_{Y(1)} > \sigma_{N(2)}$
 (The hypothesis is rejected, therefore there is a significant difference between the scores of the customer's who do and do not work in the service industry.)
- Level of significance: $\alpha = 0.05$
- Criterion: Reject the null hypothesis if $F_{stat} > 1.00$, where 1.00 is the value of F_{crit} for $df_1 = 192$ and $df_2 = 262$ degrees of freedom.
- Calculation:
$$F_{stat} = \frac{s_1^2}{s_2^2} = \frac{(0.46)^2}{(0.33)^2} = \frac{0.21}{0.11} = 1.89$$
- Decision: Since $F_{stat} = 1.89$ and is greater than 1.00, one can reject the null hypothesis and one can state that there is a significant difference between the scores of the customers who do and do not work in the service industry.

The entire sets of results will be discussed in more detail in Chapter 6.

Table 5.27: Customer Industry Type versus SERVQUAL Un-weighted

Customer Industry Type Test for SERVQUAL UN-WEIGHTED			
YES		NO	
Mean	-0.60	Mean	-0.53
Standard Deviation	0.46	Standard Deviation	0.33
Variance	0.21	Variance	0.11
Sample Size	193	Sample Size	263
<i>df (Degrees of Freedom)</i>	192	<i>df (Degrees of Freedom)</i>	262
<i>F-stat</i>		1.89	
<i>F-crit</i>		1.00	
H ₀ Accepted or Rejected		Reject	

Note that there is a slight difference between the manually calculated *F-stat* value and that calculated in Microsoft Excel. This is caused by Excel carrying over decimals internally while calculating the required values.

It must be noted that the method used to calculate the results for SERVQUAL weighted and SERVPERF un-weighted and weighted are the same, therefore only the sample calculations for SERVQUAL un-weighted (Table 5.27) will be shown. Below the results for SERVQUAL weighted, SERVPERF un-weighted and SERVPERF weighted have been shown in Tables 5.28, 5.29 and 5.30 respectively.

Table 5.28: Customer Industry Type versus SERVQUAL Weighted

Customer Industry Type Test for SERVQUAL WEIGHTED			
YES		NO	
Mean	-0.69	Mean	-0.60
Standard Deviation	0.52	Standard Deviation	0.37
Variance	0.27	Variance	0.14
Sample Size	193	Sample Size	263
<i>df (Degrees of Freedom)</i>	192	<i>df (Degrees of Freedom)</i>	262
<i>F-stat</i>		1.93	
<i>F-crit</i>		1.00	
H ₀ Accepted or Rejected		Reject	

Table 5.29: Customer Industry Type versus SERVPERF Un-weighted

Customer Industry Type Test for SERVPERF UN-WEIGHTED			
YES		NO	
Mean	5.83	Mean	5.88
Standard Deviation	0.44	Standard Deviation	0.32
Variance	0.19	Variance	0.10
Sample Size	193	Sample Size	263
<i>df (Degrees of Freedom)</i>	192	<i>df (Degrees of Freedom)</i>	262
<i>F-stat</i>		1.90	
<i>F-crit</i>		1.00	
H ₀ Accepted or Rejected		Reject	

Table 5.30: Customer Industry Type versus SERVPERF Weighted

Customer Industry Type Test for SERVPERF WEIGHTED			
YES		NO	
Mean	5.79	Mean	5.85
Standard Deviation	0.51	Standard Deviation	0.37
Variance	0.26	Variance	0.13
Sample Size	193	Sample Size	263
<i>df (Degrees of Freedom)</i>	192	<i>df (Degrees of Freedom)</i>	262
<i>F-stat</i>		1.94	
<i>F-crit</i>		1.00	
H ₀ Accepted or Rejected		Reject	

5.4.6 Dimension Distribution

In this section the results of the dimension distribution at each dealership, as perceived by the customers, will be investigated. The data shown in Tables 5.31 is the average weighting applied to each dimension by the customers at each dealership. The data presented in Table 5.32 shows the percentage of respondents indicating which dimension is most important. The data shown in Table 5.31 was calculated by taking the average of all the scores assigned to a specific dimension by the customers. A sample calculation for the Tangibles dimension for Dealership C is shown.

Average Tangibles Score

$$\begin{aligned}
 &= \frac{\text{Sum of Customers assigned Dimension Scores}}{\text{Number of Customers}} \\
 &= \frac{10 + 15 + 15 + 4 + 5 + 20 + 10 + 0 + 10 + 10 + 10 + 10 + 10 + 20 + 10 + 5 + 10}{17} \\
 &= 10.24
 \end{aligned}$$

All customers, including those who did not complete Section 4 (Perceptions Measurement) of the survey were included in the sample for the average dimension scores. It must be noted that, once again, Microsoft Excel was used to calculate all the values in Tables 5.31, therefore, calculated scores could differ slightly from those manually calculated due to Excel being able to carry all its decimal places.

Table 5.31: Customers' Dimension Comparison

Dealerships	SERVQUAL Dimensions				
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Dealership A	15.74	29.88	17.08	17.64	19.66
Dealership B	14.83	36.28	18.46	17.14	13.29
Dealership C	10.24	42.94	19.41	16.24	11.18
Dealership D	13.61	36.21	20.15	16.24	13.79
Dealership E	15.36	37.38	19.88	13.81	13.57
Dealership F	16.37	36.21	17.68	16.26	13.47
Dealership G	10.71	39.23	17.18	17.31	15.58
Dealership H	16.33	31.10	18.58	17.73	16.27
Dealership I	14.46	37.23	18.48	16.29	13.53
Dealership J	12.88	40.21	16.96	15.99	13.97
Dealership K	13.17	39.25	18.14	17.54	11.90
Dealership L	12.95	37.05	18.18	16.82	15.00
Dealership M	13.61	31.97	21.75	19.06	13.61
Average	13.87	36.53	18.61	16.77	14.22

Table 5.32: Percentage of Respondents Indicating which Dimension is Most Important

Percentage of Respondents Indicating which Dimension is Most Important					
Dealerships	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Dealership A	5.41%	54.05%	6.76%	12.16%	21.62%
Dealership B	11.53%	60.83%	11.39%	10.83%	5.42%
Dealership C	0.00%	79.41%	11.76%	8.82%	0.00%
Dealership D	5.86%	71.01%	12.42%	4.85%	5.86%
Dealership E	10.48%	67.62%	15.24%	0.95%	5.71%
Dealership F	15.09%	58.07%	7.19%	11.58%	8.07%
Dealership G	3.08%	64.62%	12.05%	10.77%	9.49%
Dealership H	13.46%	50.96%	11.86%	13.78%	9.94%
Dealership I	9.17%	63.18%	13.18%	9.91%	4.55%
Dealership J	4.61%	77.65%	4.12%	7.30%	6.32%
Dealership K	4.13%	66.83%	14.18%	11.80%	3.07%
Dealership L	4.24%	63.33%	8.79%	14.09%	9.55%
Dealership M	3.33%	57.04%	20.93%	11.20%	7.50%
Average	6.95%	64.20%	11.53%	9.85%	7.47%

In Figure 5.4 shows a graphical display of the calculations for the average dimension scores for the customers' dimension distribution.

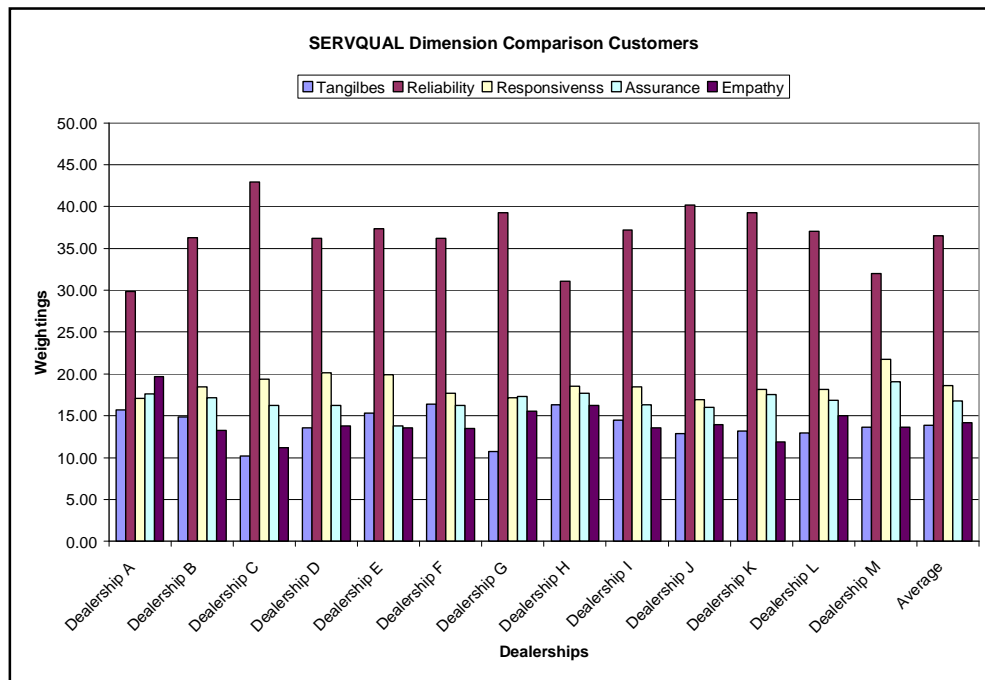


Figure 5.4: Dimension Distribution of Customers

5.4.7 Customer Type Comparison

In this section a comparison between the service quality scores of First Time Customers and regular (Non-First Time) Customers will be made. To determine whether or not the customer had or had not used that specific dealership for the first time Question 1 (“Is this your first visit to this dealership?”), from Section 1 of the questionnaire, was asked of the customer. The data used to conduct this test and generate the result shown can be found in Column 2 of the Personal Details Tables for Customers in Appendix F. The column has been named “First Visit”.

Tables 5.33 and 5.34 show the results of the F-test for SERVQUAL un-weighted and weighted; while Table 5.35 and 5.36 show the results of the F-test for SERVPERF un-weighted and weighted. The same formulas as those in the previous statistical test for the Customer Industry type were again used for the hypothesis tests below.

After separating the data into its correct categories, the mean, standard deviation and variance of the two samples (Customer who had and had not used the dealership for the first time) were

first calculated using the mathematical functions available in Microsoft Excel. After having calculated these values the F-stat and F-crit values for the various data sets were then calculated. Below the sample calculations for the SERVQUAL un-weighted data set is shown.

- Null hypothesis: $\sigma_{Y(1)} = \sigma_{N(2)}$
 (The hypothesis is accepted, therefore there is no significant difference between the scores of a first time customer and a customer who has used the dealership before.)
- Alternate hypothesis: $\sigma_{Y(1)} > \sigma_{N(2)}$
 (The hypothesis is rejected, therefore there is a significant difference between the scores of a first time customer and a customer who has used the dealership before.)
- Level of significance: $\alpha = 0.05$
- Criterion: Reject the null hypothesis if $F_{stat} > 1.43$, where 1.43 is the value of F_{crit} for $df_1 = 34$ and $df_2 = 420$ degrees of freedom.
- Calculation:
$$F_{stat} = \frac{s_1^2}{s_2^2} = \frac{(1.05)^2}{(0.94)^2} = \frac{1.09}{0.88} = 1.25$$
- Decision: Since $F_{stat} = 1.25$ and is less than 1.43, one can accept the null hypothesis and one can state that there is no significant difference between the scores of a first time customer and a customer who has used the dealership before.

For all the results below where H_0 was accepted a *t-test* will now be performed to check whether the population means may be assumed to be equal. Equation 16 and the methodology introduced earlier will, again, be used to calculate the *t-stat* and *t-crit* values.

Table 5.33: Customer Type Comparison for SERVQUAL Un-weighted

Customer Type Comparison for SERVQUAL UNWEIGHTED			
Yes (1)		No (2)	
Mean	-0.72	Mean	-0.53
Standard Deviation	1.05	Standard Deviation	0.94
Variance	1.09	Variance	0.88
Sample Size	35	Sample Size	421
<i>df (Degrees of Freedom)</i>	34	<i>df (Degrees of Freedom)</i>	420
F-test			
<i>F-stat</i>		1.25	
<i>F-crit</i>		1.43	
H ₀ Accepted or Rejected		Accept	
t-test			
<i>t-stat</i>		1.141	
<i>t-crit</i>		1.645	
Decision		Population means are equal	

It must be noted that the method used to calculate the results for SERVQUAL weighted and SERVPERF un-weighted and weighted are the same, therefore only the sample calculations for SERVQUAL un-weighted (Table 5.33) will be shown. Below the results for SERVQUAL weighted, SERVPERF un-weighted and SERVPERF weighted have been shown in Tables 5.34, 5.35 and 5.36 respectively.

Table 5.34: Customer Type Comparison for SERVQUAL Weighted

Customer Type Comparison for SERVQUAL WEIGHTED			
Yes (1)		No (2)	
Mean	-0.70	Mean	-0.61
Standard Deviation	1.11	Standard Deviation	1.04
Variance	1.22	Variance	1.09
Sample Size	35	Sample Size	421
<i>df (Degrees of Freedom)</i>	34	<i>df (Degrees of Freedom)</i>	420
<i>F-stat</i>		1.12	
<i>F-crit</i>		1.43	
H ₀ Accepted or Rejected		Accept	
t-test			
<i>t-stat</i>		0.488	
<i>t-crit</i>		1.645	
Decision		Population means are equal	

Table 5.35: Customer Type Comparison for SERVPERF Un-weighted

Customer Type Comparison for SERVPERF UNWEIGHTED			
Yes (1)		No (2)	
Mean	5.70	Mean	5.90
Standard Deviation	1.08	Standard Deviation	0.89
Variance	1.16	Variance	0.79
Sample Size	35	Sample Size	421
<i>df (Degrees of Freedom)</i>	34	<i>df (Degrees of Freedom)</i>	420
<i>F-stat</i>		1.47	
<i>F-crit</i>		1.43	
H ₀ Accepted or Rejected		Reject	

Table 5.36: Customer Type Comparison for SERVPERF Weighted

Customer Type Comparison for SERVPERF WEIGHTED			
Yes (1)		No (2)	
Mean	5.76	Mean	5.85
Standard Deviation	1.12	Standard Deviation	0.97
Variance	1.25	Variance	0.94
Sample Size	35	Sample Size	421
<i>df (Degrees of Freedom)</i>	34	<i>df (Degrees of Freedom)</i>	420
<i>F-stat</i>		1.33	
<i>F-crit</i>		1.43	
H ₀ Accepted or Rejected		Accept	
t-test			
<i>t-stat</i>		0.521	
<i>t-crit</i>		1.645	
Decision		Population means are equal	

The entire sets of results will be discussed in more detail in Chapter 6.

5.4.8 Age Comparison

In this section statistical tests are performed to see whether or not the age category of a customer has an influence on his/her service quality score. To undertake this comparison an ANOVA test was performed between the five sets of data categories i.e. < 25, 25 – 34, 35 – 44, 45 – 54 and > 55. Before continuing with the ANOVA test it is important to note that there are

three assumptions on which the validity of ANOVA findings depend. If any of the three assumptions are violated, the ANOVA findings are less valid. (Wegner, 2008, p 394) These assumptions are:

1. The data used is normally distributed.

As stated earlier the data was found to be “moderately” skewed however normality was assumed.

2. The variances from the different populations are equal.

To test whether the variances are equal the following rule of thumb can be applied:

“Divide the largest sample variance by the smallest sample variance. If the ratio is less than 3, accept H_0 of equal variances, otherwise reject H_0 ”. (Wegner, 2008, p 394) The results are shown in Table 5.37.

Table 5.37: Test for equal variances for ANOVA

	SERVQUAL Un-weighted	SERVQUAL Weighted	SERVPERF Un-weighted	SERVPERF Weighted
Largest sample variance:	0.47	0.63	0.59	0.68
Smallest sample variance:	2.04	2.42	1.55	1.79
$\frac{\text{Largest sample variance}}{\text{Smallest sample variance}}$	4.36	3.85	2.65	2.63
Accept or reject H_0 of equal variances	Reject	Reject	Accept	Accept

3. The samples are independent.

Each sample falls into its own age category and is therefore independent.

Before continuing one must check whether or not any of the three assumptions were violated. From the results shown in Table 5.37 it can be seen that both the SERVQUAL un-weighted and weighted models failed the test of equal variances, as a result these models will be excluded from the ANOVA test.

This test included all customers who had completed the entire questionnaire (Sections 1 to 4). Tables 5.38 and 5.39 show the calculated statistical values for the SERVPERF un-weighted and weighted models.

The data used to calculate the results shown in Tables 5.38 and 5.39 can be found in Column 6 of the Customer Personal Details Tables in Appendix F. The column has been named "Age Group". A sample calculation of how the values for SERVPERF un-weighted results were achieved, will now be illustrated. Due to the size of the sample only the formulas used during the calculations will be shown below. The values shown in the Tables were achieved by making use of the Microsoft Excel mathematical function.

Null hypothesis: $H_0: \mu_1 = \mu_2 = \mu_k$
(H_0 states that the service quality score is not influenced by the age of the customers and therefore the hypothesis is accepted.)

Alternate hypothesis: H_1 : At least one μ_i differs
(H_1 states that at least one of the age group means is different and therefore the hypothesis is rejected.)

Level of significance: $\alpha = 0.05$

Criterion: Reject the null hypothesis if $F_{stat} > 2.37$, where 2.37 is the value of F_{crit} for $df_1 = 4$ and $df_2 = 451$ degrees of freedom.

Calculation: SSB (Sum of Squares between Groups):

$$\sum_j^k n_j (\bar{x}_j - \bar{x} \dots)^2 = 11.55$$

SST (Total Sum of Squares):

$$\sum_i \sum_j (x_{ij} - \bar{x} \dots)^2 = 372.57$$

SSW (Sum of Squares within groups) = $SST - SSB = 361.02$

MSB (Mean Square between groups) = $SSB/df = 11.55/4 = 2.887$

MSW (Mean Square within groups) = $SSW/df = 361.02/451 = 0.800$

F_{stat} (Calculated *F-value*) = $MSB/MSW = 2.887/0.800 = 3.61$

Decision: Since $F_{stat} = 3.61$ and is greater than 2.37, one can accept the alternate hypothesis and one can state that that at least one of the age group means are different.

It must be noted that the method used to calculate the results for SERVPERF un-weighted and SERVPERF weighted are the same, therefore only the sample calculations for SERVPERF un-weighted (Table 5.38) will be shown. The results obtained for SERVPERF weighted have been illustrated in Tables 5.39, below.

Table 5.38: Age Comparison for SERVPERF Un-weighted

Age Comparison for SERVPERF Un-weighted						
Groups	SS (Sum of Squares)	df (Degrees of Freedom)	MS (Mean Square)	F-stat	F-crit	H ₀ Accepted or Rejected
Between Groups	11.55	4	2.887	3.61	2.37	Reject
Within Groups	361.02	451	0.800			
TOTAL	372.57	455				

Table 5.39: Age Comparison for SERVPERF Weighted

Age Comparison for SERVPERF Un-weighted						
Groups	SS (Sum of Squares)	df (Degrees of Freedom)	MS (Mean Square)	F-stat	F-crit	H ₀ Accepted or Rejected
Between Groups	12.36	4	3.091	3.29	2.37	Reject
Within Groups	423.82	451	0.940			
TOTAL	436.19	455				

The entire set of results will be discussed in more detail in Chapter 6.

5.4.9 Service Quality Comparison against Industry Measure

In this section the comparison between the service quality scores generated in this research will be compared with the scores from the J.D. Power and Associates South African Customer Satisfaction Index (CSI) StudySM and the Synovate Quality Awards with their Competitive Customer Satisfaction Index (CCSI). It must be noted that this comparison will only be carried out with SERVPERF. The reason for this being that SERVPERF is a performance measurement or perception measurement tool as are both the surveys from J.D. Powers and Associates and Synovate.

To make the comparison which follows, a meaningful one, one must convert the SERVPERF un-weighted and weighted scores to a percentage. To convert these scores into percentage format, each score must be divided by the maximum attainable score for both the un-weighted and

weighted scores respectively. For both the un-weighted and weighted scores the maximum achievable score is 7.00. This score is achieved when a dealership scores 7.00 in all 22 questions relating to perception measurement. Therefore to convert the SERVPERF score into a percentage format, the un-weighted and weighted scores were all divided by 7.00 and then multiplied by 100 to convert the calculated value to a percentage.

Table 5.40: SERVPERF Scores Conversion

DEALERSHIP C				
Customer	Calculated SERVPERF Scores		Converted Percentage Scores	
	Un-weighted	Weighted	Un-weighted	Weighted
Customer 1	6.61	6.77	94.43%	96.64%
Customer 2	1.73	1.64	24.71%	23.39%
Customer 3	6.95	6.96	99.29%	99.46%
Customer 4	2.34	1.32	33.43%	18.86%
Customer 5	6.29	5.34	89.86%	76.25%
Customer 6	5.81	5.80	83.00%	82.86%
Customer 7	6.78	6.83	96.86%	97.57%
Customer 8	5.39	5.88	77.00%	83.93%
Customer 9	4.97	5.39	71.00%	76.93%
Customer 10	4.87	4.84	69.57%	69.11%
Customer 11	5.60	5.58	80.00%	79.64%
Customer 12	4.56	4.66	65.14%	66.57%
Customer 13	5.71	5.75	81.57%	82.14%
Customer 14	4.97	3.99	71.00%	56.93%
Customer 15	5.85	5.58	83.57%	79.71%
Customer 16	4.40	4.21	62.86%	60.18%
Average	5.18	5.03	73.96%	71.89%

In Table 5.40 the SERVPERF scores for Dealership C have been converted to percentage scores. Sample calculations of how this conversion was calculated will be shown below for Customer 5. The converted percentage scores for the rest of the dealerships can be found in Appendix M.

$$\begin{aligned}
 &\text{Un-weighted SERVPERF Percentage converted score} \\
 &= \frac{\text{Customers calculated unweighted SERVPERF score}}{\text{Maximum SERVPERF score}} \\
 &= \frac{6.29}{7} \\
 &= 89.86\%
 \end{aligned}$$

$$\begin{aligned}
 &\text{Weighted SERVPERF Percentage converted score} \\
 &= \frac{\text{Customers calculated weighted SERVPERF score}}{\text{Maximum SERVPERF score}} \\
 &= \frac{5.34}{7} \\
 &= 76.25\%
 \end{aligned}$$

After having converted all the SERVPERF un-weighted and weighted scores for all the dealerships, the average scores of the dealerships were then organized into each manufacturer and the average per manufacturer was then calculated. After this average had been calculated the equivalent scores from the J.D. Power and Associates 2008 South Africa Customer Satisfaction Index (CSI) StudySM and the 2008 Synovate Quality Awards for the appropriate manufacturers were then extracted from Figures 2.6 and 2.7 respectively. A summary of these results can be found below in Table 5.41.

Table 5.41: SERVPERF comparison with Industry Measures

Manufacturers	J.D. Power and Associates 2008 South Africa Customer Satisfaction Index (CSI) Study SM (Based on a 1,000-point scale)	Synovate Quality Awards 2008	SERVPERF Un-weighted Percentage Scores	SERVPERF Weighted Percentage Scores
Subaru	855	-	90.85%	91.21%
Volkswagen	794	81.0%	86.66%	86.44%
Audi	854	81.5%	86.58%	86.76%
Toyota	839	85.1%	84.38%	84.31%
Average	807	80.6%	83.82%	83.33%
BMW	847	79.5%	82.67%	81.62%
Renault	818	76.3%	73.96%	71.89%

It must be noted that the results for some manufacturers could not be obtained or used and therefore some dealerships have been excluded from this comparison. In order to ensure confidentiality is not breached, the dealerships and their specific manufacturers, cannot be indicated in this research.

6. Discussion

In this discussion, firstly a brief overview of the research performed will be given. This will be followed by an explanation of how the research process progressed. After this section on research processes, the discussion about the link between service quality and profitability will be completed. Following on from this, a discussion about the relationship between service quality and profitability and the relevant data collected during this research and any trends which occurred, will be presented. This will be followed by a discussion on the comparison between the scores achieved by the customers and those achieved by the employees. After this, a brief look or comparison of the SERVPERF model with the current methods being used in the motor industry will be covered. Finally a short comparison between the SERVQUAL and SERVPERF models will be given.

6.1 Research Overview

The quality of the service rendered to customers by motor dealerships is measured in terms of a number of dimensions as discussed in the literature survey, in Chapter 2. From the customer's point of view the service delivered is of prime importance both for himself and for the future prospects of the dealerships. From the dealership's point of view the service delivered to customers is also important as these satisfied customers are their source of income. The dealer, however, must also take financial performance into account, the investigation of a link between a measure of profit and service quality is, therefore, also required. It may be expected that a link or relationship between service quality and a measure of profit does, in fact, exist. Different methods are available to measure the quality of service offered by dealerships. In order to confirm the results obtained from a particular method of measurement, it is important to compare this to a method which is regarded as a benchmark in the industry.

The primary objective of this research is to examine whether there is a relationship between Service, as measured by Service Quality, and Profit in various South African Motor Dealerships.

This will be achieved through:

-
- Measuring the expectations and perceptions of the customers and employees of the dealership, using the SERVQUAL and SERVPERF models. (The two models used during this research)
 - Comparing the Gap between the scores of the customer and those of the employees. i.e. Gap 1 of the Gap Model.
 - Comparing the results of the SERVQUAL and SERVPERF models.
 - Finally, a comparison between SERVQUAL and SERVPERF and current methods that measure Customer Satisfaction, used in the local motor industry, is set out. These include the Synovate Quality Awards measured through its Competitive Customer Satisfaction Index (CCSI) and the J.D. Power and Associates South African Customer Satisfaction Index (CSI) StudySM.

After having researched the many models that are currently suggested and used to measure service quality, the first step was to choose the models that would be used to measure service quality within the context of the Gauteng dealerships. There were more than 20 models which could be used to measure service quality, the two models which were most frequently used to measure service quality were chosen, as these models were used as a foundation to build other service quality models. The models, SERVQUAL and SERVPERF, include the five service quality dimensions: Tangibles, Reliability, Responsiveness, Assurance and Empathy (defined in Chapter 2). SERVQUAL measures customer expectations and perceptions and at the same time includes the “importance weighting” assigned by the customer to the five dimensions of service quality. SERVPERF measures only customer perceptions of the service received and their “importance weighting” as assigned to each service quality dimension.

The methodology used, data gathered and results attained from all the surveys will now be analysed and used as a basis for investigating the objectives set out at the beginning of this research.

6.2 Research Methodology

After the models were selected a pilot survey was conducted. The results achieved with this pilot survey were not found to be favourable. These results attained were mainly due to a low

response from the participants of the pilot survey while using the email based survey. As a result a decision was then taken to spend a week in each of the service departments of the 13 selected dealerships. Ten of the dealerships chosen formed part of a Motor Holding Group while the other three were independent dealerships. Dealerships varied in brand, size and location within the Gauteng region. During the course of this research 577 customers were approached, 456 of these accepted to be interviewed. Each interview conducted with a customer was done on personal level. During the interview process customers were interviewed in the morning and afternoon while dropping off and collecting their vehicles.

6.3 Cronbach Alpha and Reliability

Before considering the data captured and the results obtained from the statistical tests performed on the data; one must first test the reliability of the data collected. As discussed earlier in the literature survey, the Cronbach Alpha Co-efficient was used to determine the reliability of the data captured.

When calculating the Cronbach alpha co-efficient for the customers, each dealership's customer dimensions for both expectations and perceptions were calculated individually. Therefore, for each dealership ten Cronbach Alpha Co-efficients were calculated; five for expectations and five for perceptions. The result of these calculations are seen in Table 6.1 where the average across all 13 dealerships of the customers' Cronbach Alpha Co-efficients have been tabulated.

Table 6.1: Average Cronbach Alpha Co-efficients for all Customers Interviewed

CUSTOMER AVERAGE					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.79	0.86	0.80	0.82	0.83
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.84	0.92	0.88	0.91	0.88

From Table 6.1 it can be seen that all Cronbach Alpha Co-efficient scores range from 0.79 to 0.92 and have a combined average of 0.85. If one then examines the Cronbach Alpha Co-efficients

gathered by Asubonteng *et al.* (1996) in Appendix C, it can be noted that the values range from 0.43 to 0.99, with an average of 0.81. Therefore if one makes a comparison of the two sets of Cronbach Alpha Co-efficient ranges and averages it can be ascertained that the data collected during the course of this research can be considered reliable and that, therefore, statistical tests can be performed with the data gathered.

6.4 Data Analysis

The final step before one could perform any statistical tests or analyses on the data collected was to look at the volume of data and the type of distribution in the data and whether or not there was any bias present.

When looking at the volume of data one can compare the size of the data collected in this research to that of past SERVQUAL research in order to evaluate whether or not the data collected was found to be good, average or poor. Looking at the study performed by Asubonteng *et al.*, 1996 (In Appendix C) it can be seen that the smallest sample size for a study done was 27 while the largest sample size was 775. Looking at these figures one can state that the sample size collected during this research was favourable as it fell closer to the larger sample sizes of other SERVQUAL survey studies in the research industry.

After having categorised the data into the various classes, as shown in the previous chapter, it was found that the data were “moderately” skewed to the left implying that there are few very small data values relative to the other values in the sample. (Wegner, 2007, p. 133) With this result in mind one was able to assume that the data, gathered during this research, was normally distributed.

With these findings in mind it was concluded that statistical analyses of the data could be performed.

6.5 The Link between Service Quality and Profitability

A method that one can use to analyse the data obtained in this research, is to perform an analysis of covariance (ANCOVA). Capon *et al.* (1990) used ANCOVA to study the relationship of performance measurement through financial performance. The end result of the study performed by Capon *et al.* (1990) found that growth was related to profit and the money spent on research and design was found to have a strong relationship with increased profitability.

In order to apply an analysis of covariance (ANCOVA) on a set of data the dependent variables must be of the continuous type and some of the independent variables must be of the categorical type and some must be of the continuous type. (Jekel *et al.* (2001), p.211) The data in this research does not conform to the type required for ANCOVA as both the independent (SERVQUAL and SERVPERF dimension scores) and dependent (measure of profit) variables are of a continuous type. Although ANCOVA was not performed on the data gathered in this research the results of Capon *et al.* (1990) have been included as a matter of interest.

Since ANCOVA could not be performed on the present data, as stipulated above, it is suggested that the appropriate analysis for data is a multiple linear regression (Jekel *et al.* (2001), p.211). When performing the regression only the value for “Percentage Gross Profit of Customer Labour Sales” was used. This was undertaken as it formed a greater portion of the gross profit, which was measured in this research. The gross profit which is related to the service department of each dealership was directly linked to and affected by the customer.

The results from the multiple linear regression in Table 5.22 found that, for the SERVQUAL dimensions, no correlation between the percentage gross profit, as generated by customer sales, existed. When considering the results of the multiple linear regression, for the SERVPERF dimensions in Table 5.23, it was found that there was only a correlation between the percentage gross profit and the Empathy dimension.

One of the objectives set out during this research was to test whether a link between service quality and a measure of profit exists. The above analysis showed that there was no relationship between service quality and the measure of profit from the data generated in this research.

This result was found to be the case as the data collected during this research was present data and the financials to which they were compared related to for the previous year's figures. In other words the service quality data collected presently was being compared to financial figures generated for the same period. This meant that the effects of the Service Quality measured presently would only be 'felt' in the next financial year. Therefore, one cannot compare the Service Quality scores of present to the financial figures of the present. One must compare to Service Quality scores of present to the financial figures of the future i.e. the financial figures for the period in which the data was collected.

6.6 Customer Employee Score Comparison

Gap 1 refers to the difference between customer expectations of service and a company's understanding of those expectations. A primary cause for not meeting customer expectations is that the firm lacks an accurate understanding of exactly what those expectations are (Ziethaml *et al.*, 2006). In the customer-employee score comparison performed during this research one tries to physically quantify Gap 1.

For the SERVQUAL model, shown in Table 5.24, it was found that the Tangibles dimension had no significant difference on the gap being measured while performing the F-test. This meant that the population variances were equal and that therefore a t-test was then performed. The result of the t-test showed that the population means were not equal and therefore the Tangibles dimension needed to be investigated and improved as there was still a gap between the customer and employee scores. For the remaining four service quality dimensions and the un-weighted and weighted scores the population variances were found to be unequal and therefore this also requires attention from the dealership management, so as to ensure closure of the gap.

For the SERVPERF model, shown in Table 5.25, the Tangibles dimension was again found to have no significant difference on the measured gap when performing an F-test. This result shows that the population variances are equal and that a t-test was required. After the t-test was performed it was found that the population means were equal thus implying the customers and employees understanding and point of view for the Tangibles dimension was the same.

However, for the rest of the four service quality dimensions and the un-weighted and weighted scores the population variances were not equal and that therefore there was a significant difference in the gap measured. These aspects therefore required attention from the dealership management in order to improve this gap.

With this in mind, figures showing the physical score difference for the dimensions and overall service quality scores between the customers and the employees score were generated. Figure 5.3 shows the SERVPERF Reliability graph. The complete set of Figures for both SERVQUAL and SERVPERF can be found in Appendix L.

Looking at the SERVQUAL data and figures first, it was found that the Dealership with the largest physical score difference between the customers and their employees was Dealership C. When one looks at the dimension scores and overall service quality scores, Dealership C was also found to have the worst scores. The results that the service quality and dimensions scores are the worst re-affirm the results shown in Figures L1 to L7 found in Appendix L.

If one then examines the physical difference represented by Figures L1 to L7 for the SERVQUAL data and concentrates on the Dealerships with the smaller gaps or Dealerships where the customers scores are above those of the employees; it can be seen that these Dealerships have a better dimension score and better overall service quality scores.

When considering the SERVPERF dataset and results a similar pattern to that of the SERVQUAL dataset was found. The dealership (Dealership C) with the largest physical gaps on Figures L8 to L13 between its customers and employees was found to have the worst dimension and overall service quality scores. While the dealerships with the smaller physical gaps or dealerships where the customers scores were higher than those of the employees were found to have better dimension and overall service quality scores.

Therefore, from the above results and trends it can be concluded that a dealership whose employees do not have an understanding of what their customer's expectations are, will result in a negative impact on the service quality and consequently the satisfaction level of the customer will also be poorer.

6.7 Customer Industry Type Comparison

Hoffman *et al.* (2001, p 315) state that the customer's personal philosophies, or personal views about the meaning of service and the manner in which service providers should conduct themselves, will also heighten his or her sensitivities. Customers who work in the service sector are particularly sensitive to the calibre of service provided i.e. they want to be treated the way they believe they treat their customers.

In this analysis, therefore the SERVQUAL and SERVPERF weighted and un-weighted scores for customers who do and do not work in the service industry will be compared statistically. A breakdown of the number of customers who did and did not work in the service industry can be found in Table 5.26. For this statistical test an F-test on the data was performed. The results of the performed F-test for the SERVQUAL un-weighted and weighted results can be found in Tables 5.27 and 5.28; while the SERVPERF un-weighted and weighted results can be found in Tables 5.29 and 5.30. For the SERVQUAL un-weighted scores the *F-stat* value was calculated to be 1.89; while for the SERVQUAL weighted scores the *F-stat* value was calculated to be 1.93. If one examines the SERVPERF scores, the *F-stat* value for SERVPERF un-weighted and weighted were computed to be 1.90 and 1.94 respectively. When comparing these calculated *F-stat* values to the corresponding *F-crit* values (1.00) all four scores were found to be greater than the *F-crit* value of 1.00. These results indicate that the hypothesis could be rejected and that the population variances were not equal. Therefore there is a significant difference between the scores of the customer who do and do not work in the service industry.

6.8 Dimension Distribution

In the research by Parasuraman *et al.* (1990) an analysis of the distribution of dimensions was investigated. From this investigation, of Customers in the Repairs-and-Maintenance sector, it was found that of the 184 respondents interviewed 57.2% thought that the Reliability dimension was the most important dimension; 19.9% thought that the Responsiveness dimension was most important; 12.0% thought that the Assurance was the most important dimension; 9.6%

thought that the Empathy dimension was most important while only 1.2% of the respondents thought that the Tangibles was the most important dimension.

In this research, of the 456 customer interviewed 64.20% thought that the Reliability dimension was the most important dimension; 11.53% thought that the Responsiveness dimension was the most important; 9.85% thought that the Assurance dimension was the most important; 7.47% thought that the Empathy was the most important dimension while only 6.95% of people interviewed thought that the Tangibles dimension was the most important.

If one does a comparison of the above results it is important to note that the trend found in this research follows a similar trend to that of Parasuraman *et al.* (1990). That is, that the majority of people felt that the Reliability dimension was the most important dimension. This was then followed by the Responsiveness, Assurance, Empathy and Tangibles dimensions, in this order.

Therefore, with the above result in mind, it can be stated that the trend measured by Parasuraman *et al.* (1990) when first developing SERVQUAL remains the same and that customers today still feel that the Reliability dimension is by far the most important and that it carries the most weighting, as indicated in Table 5.31 and 5.32. Reliability would be the most important dimension as it is the dimension that has the closest link to the performance of the Dealership in terms of the service given or offered.

6.9 Customer Type Comparison

During this analysis the statistical difference between a customer who had visited the dealership before (a regular) and a customer who had not visited the dealership before (a new customer) was measured. This test was performed to check whether or not a new customer is more or less harsh when rating the serviced received.

From the results of the F-tests performed on the four data sets shown in Tables 5.33 to 5.36 it what found that three of the models (SERVQUAL un-weighted and weighted and SERVPERF weighted) all accepted the hypothesis. This meant that the population variances of the three models tested were equal. As a result a *t-test* was performed to check whether the population

means were equal. The results showed that the population means were equal and that the customers view on the dealership was the same regardless of whether the customer was a new or regular customer. For the SERVPERF un-weighted model the F-test was rejected and therefore there was a significant difference between the scores of the first time customer and a customer who had used the dealership before.

From the above discussion it can be stated that regardless of whether or not a customer knows the inner workings of the dealership and has built up a relationship with the employees at that specific dealership he/she still wants to receive the same service that a new customer receives i.e. the best possible service.

6.10 Customer Age Comparison

In this analysis the effect that the customer's age has on his/her service quality score, was explored. This was done by comparing the average service quality scores of the five age categories (< 25, 25 – 34, 35 – 44, 45 – 54, > 55) across the complete dataset collected. The comparison was performed using only the SERVPERF models as the SERVQUAL models violated the assumptions of equal variances and were therefore excluded from the statistical analysis. The ANOVA statistical test was used for this analysis.

The results, in Tables 5.38 and 5.39, showed that the SERVPERF models (un-weighted and weighted) rejected the hypotheses tested which states that at least one of the age group means are different. Therefore the age of the customer had an influence on the way in which he/she rated the service received.

6.11 SERVPERF comparison against Industry Measure

If one looks at Table 5.41 it can be noted that the calculated percentage values of the two models, used in this research, are around 3% higher than those of the two models used in industry. The contributing factor to this is that the 'JD Powers and Associates 2008 South African Customer Satisfaction Index (CSI) StudySM' and the 'Synovate Quality Awards 2008' both

had a much larger sample size and also included many other manufacturers, as can be noted in Figures 2.6 and 2.7.

When analyzing and comparing the results gathered in this research and those gathered by J.D. Powers and Associates and Synovate it can be seen that in the extreme cases, in the present research, the SERVPERF models calculated values were either too high or too low. A contributing factor to this could have been that the sample size of those dealerships was too small therefore causing an over-exaggeration of the scores. When one looks at the dealerships where a larger, more realistic, sample of customers was interviewed a more reasonable score was obtained.

Therefore, this result shows that the model used in this research is comparable with that of the measures used in industry and the results obtained by industry do, in fact, give one a satisfactory measure of service quality.

6.12 SERVQUAL versus SERVPERF

In the final part of the discussion the two models used in this research (SERVQUAL and SERVPERF) are compared. This comparison will be based on the statistical tests performed during this research. When performing the financial modeling both the SERVQUAL and SERVPERF dimension scores were used. After having performed the multiple linear regression, only the Empathy dimension of SERVPERF was found to correlate with the percentage gross profit measured. Therefore, from this result it can be said that both the SERVQUAL and SERVPERF models could not be compared as both were found to have no correlation with the measure of profit used during this research.

In the comparisons between the customers' and employees' scores and the industry types in which the customers work, both the SERVQUAL and SERVPERF models were, again, used. During the analysis of the customer-employee score comparison the Tangibles dimension for both the SERVQUAL and SERVPERF models had no significant difference with respect to the gap being measured using an F-test. Upon further investigation it was found that the Tangibles dimension needed to be investigated further for the SERVQUAL model. When considering the

other remaining service quality dimensions (Reliability, Responsiveness, Assurance and Empathy) all four were found to have a significant difference in the customer-employee score comparison. It was also found that the weighted and un-weighted scores for both the SERVQUAL and SERVPERF models had a significant difference in the customer-employee gap. In the final analysis the same results for both the SERVQUAL and SERVPERF models were found. i.e. that the dimensions with the most importance, as stated by the customers earlier, have an influence on the gap between the customer and the employee.

When comparing the customer industry type the same result for the SERVQUAL and SERVPERF models was found. It was concluded that the industry in which the customer worked did have an impact on the service quality score and experience in the service industry of the customer.

In the comparison between the type of customer (new or regular customer) both the SERVQUAL and SERVPERF weighted models had the same result where the hypotheses tested were accepted; while the SERVQUAL and SERVPERF un-weighted model had opposing results as one accepted and one rejected the hypothesis tested. However, it is still difficult to draw any conclusions from this finding as three of the four models used had the same result.

When observing the comparison between the age categories of the customers and their service quality scores only the two SERVPERF models could be analysed as the two SERVQUAL models violated one of the three assumptions for the ANOVA test. Therefore no comparison can be drawn between the SERVQUAL and SERVPERF models.

In the comparison between SERVQUAL and SERVPERF done by Jain *et al.* (2004) it was noted that the SERVPERF scale was found to be the superior model for assessing the overall service quality of a firm due to the soundness and economy with which the facts and their relationships are measured. On the other hand, it was also found that the SERVQUAL scale was the superior model when one was trying to discover or identify areas relating to service quality underperformance for possible intervention by managers. In other words both models have their particular strengths.

Thus, with the above results in mind, it can be stated that neither the SERVQUAL nor the SERVPERF model was found to be more a favourable model during this research and therefore no conclusion as to whether the SERVQUAL or SERVPERF model measured service quality more reliably could be drawn.

7. Conclusion and Recommendations

During this research 13 different dealerships in the Gauteng region were visited. Each dealership varied in brand, size and location. During the time spent in the dealerships 456 customers and 82 employees were interviewed using the SERVQUAL and SERVPERF service quality models. Various objectives were set out for this research. The conclusions drawn from the statistical tests performed will now be discussed.

The Link between Service Quality and Profitability

The primary objective of this research was to study whether there is a link between service quality and a measure of profit in the service departments of selected dealerships, in the South African Motor Industry. From the results calculated and obtained in the discussion one is able to note that no correlation was found for thirteen of the fourteen tested relationships. The only correlation found was between the SERVPEREF Empathy dimension and the Percentage Gross Profit of Customer Labour Sales. Therefore one can conclude that a relationship between a current measure of profit and a current or present measure of service quality does not exist.

Customer Employee Score Comparison

From the results of the customer-employee score comparison it was concluded that the dealerships whose employee's scores were in line with those of the customers had the better or best service quality scores. Dealerships whose employees scores were the opposite to those of the customers, had the worst or least favourable service quality scores.

Customer Industry Type Comparison

For this particular study it was found that there was a significant difference between the industries within which a customer worked and his or her experience in the service industry. In other words a customer who worked in the service industry was more receptive to or critical of the service received.

Dimension Distribution

When looking at the dimension distribution the same trend as that of Parasuraman *et al.* (1990) was noted in this research. The research demonstrated that the most important dimension for a customer was Reliability, while the least important was the Tangibles dimension.

Customer Type Comparison

In this specific study of the four models it was found that there was no significant difference between the type of customer (new or regular) and his or her service quality score. In other words, whether or not a customer had experienced a service at the dealership had no influence on how he or she rated the service.

Customer Age Comparison

When comparing the customer's age group to their service quality score using the SERVPERF model it was found that at least one of the age group means was different and therefore the age did have an influence on the service quality score.

SERVPERF compared against Industry Measure

When considering the comparison between SERVPERF and the Synovate Quality Awards and the J.D. Power and Associates Customer Satisfaction Index (CSI) StudySM it can be concluded that the data generated from this study may be used in industry as the results obtained were of a comparable nature.

SERVQUAL versus SERVPERF

From all of the above statistical tests performed it was concluded that no distinction could be made, between SERVQUAL and SERVERF, as to which of the two measured service quality more favourably or accurately.

Limitations and Challenges

Limitations and challenges experienced during this research were:

- The sample size of the data collected. Compared to the size of the motor industry in Gauteng the sample collected was small. This made it more difficult to state or assume trends from the results gathered as the result might be bias due to the geographical location in which the survey was undertaken.
- Non-responsiveness of the interviewees. This could be seen in the pilot survey results where only 11.5% of the people called responded to the email sent. Evidence of this can be seen again, when the 80 people who were intercepted to take part in the study refused.
- The frame of the study. This research was only conducted in Gauteng, therefore findings and conclusions made cannot be applied across other major cities (Cape Town and Durban). However, it is likely that research carried out in other major centres would yield similar results.

For further studies it is recommended that a future measure of profit be linked to a survey undertaken in the previous year to see whether or not a relationship between a measure of service quality and profit can be found. This is recommended as the profit made for service quality measured today will only be reflected in the following financial period. Another avenue which could be explored in further studies could be a comparison of the service quality scores achieved by males to those obtained by females to see whether or not a significant difference is found between the results obtained from the two genders. Finally, including other major centres in South Africa when performing a similar research, could result in a more complete overview of service quality and performance in this industry.

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9. Appendices

9.1 Appendix A – Service Quality Models

This appendix contains additional information and diagrams relating to the various service quality models discussed in Chapter 2. The models have been split into the categories as per Chapter 2: Expectation and Perception based Models; Perception Based Models; Consumer Satisfaction Based Models; Technology Based Models as well as Models based on other theories

9.1.1 Expectation and Perception Based Models

GAP Model (Parasuraman *et al.*, 1985)

SERVQUAL was again revised in 1991 and 1994, but the five dimensional structure remained the same. At the same time the authors characterized and further defined the four gaps from their research in 1985. In Figure A1 an extended model of service quality can be seen.

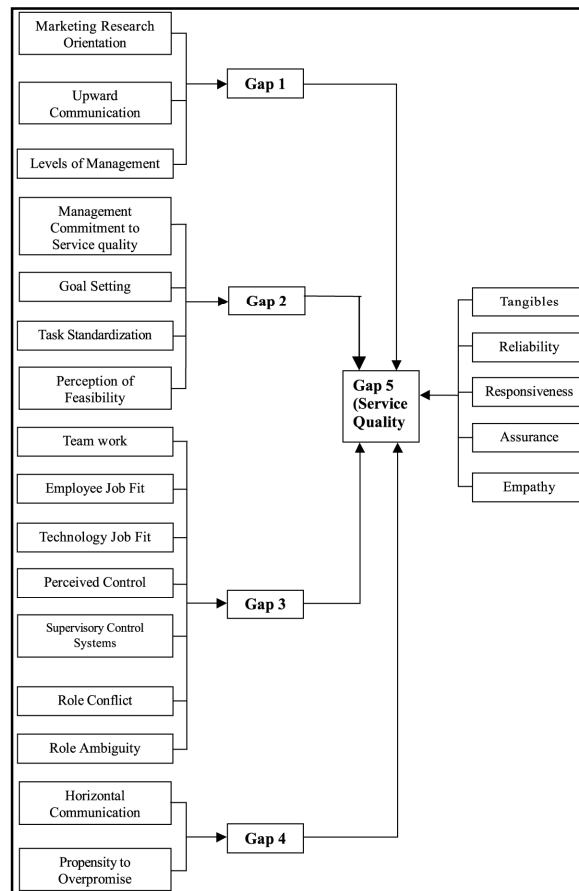


Figure A1: Extended model of GAP model, Parasuraman *et al.* (1985)

Attribute service quality model (Haywood-Farmer, 1988)

Each attribute, as shown in the Figure A2, forms the apex of a triangle. If one concentrates too much on one element, this could lead to the exclusion of another element or attribute.

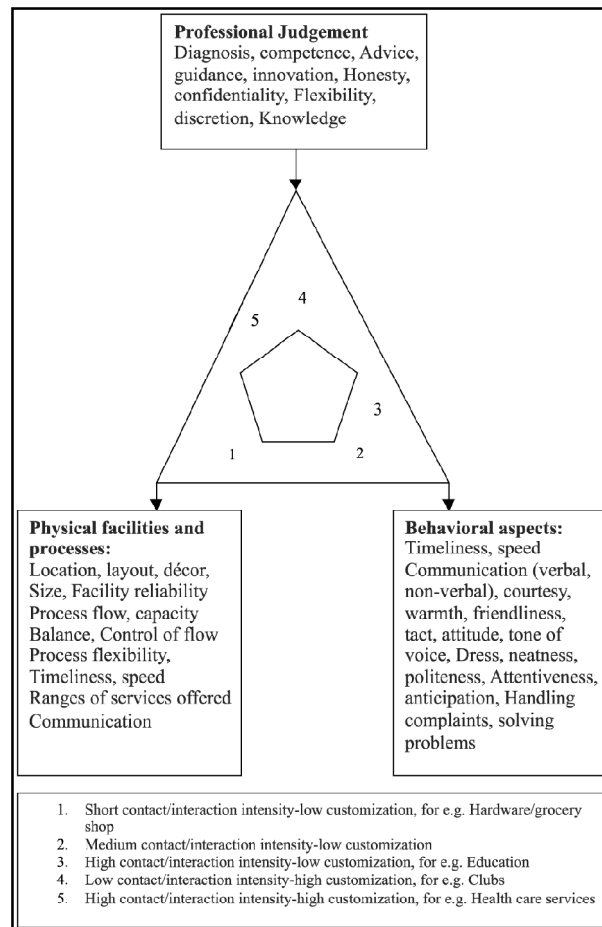


Figure A2: Attribute service quality model, Haywood-Farmer (1988)

Internal Service Quality Model (Frost and Kumar, 2000)

In this model, Internal Gap 1 illustrates the difference between support staffs' perceptions and front-line staffs' expectations. Internal Gap 2 focuses on the difference between service quality specifications and actual service delivered. This results in an internal service performance gap. Finally Internal Gap 3 draws attention to the front-line staff and the difference between their expectations and perceptions of the service quality delivered by the support staff.

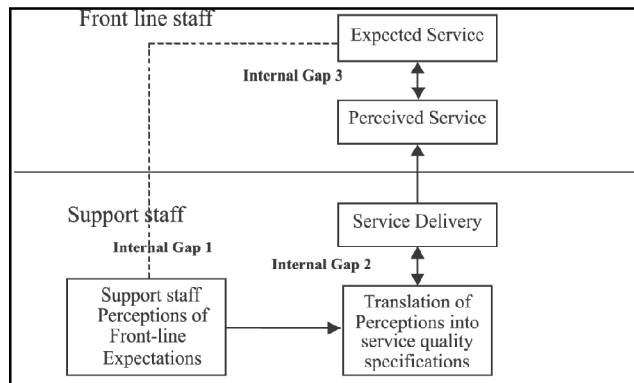


Figure A3: Internal Service Quality Model, Frost and Kumar (2000)

9.1.2 Perception Based Models

Technical and Functional Quality Model (Grönroos, 1984)

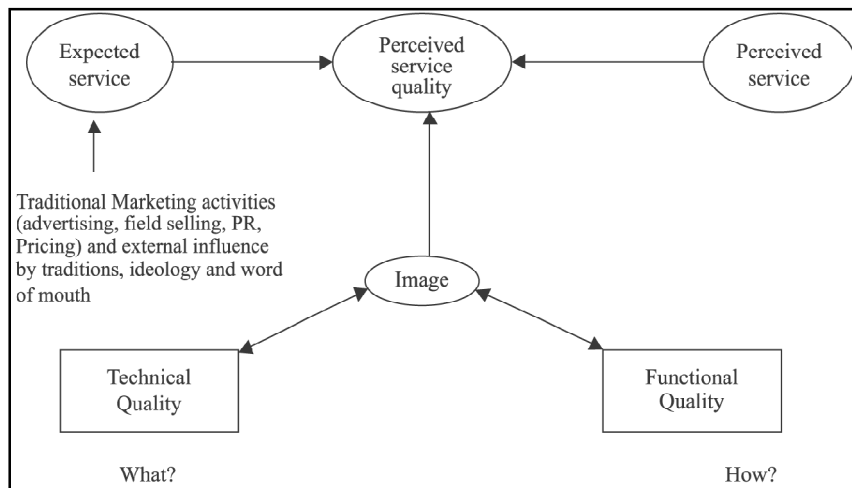


Figure A4: Technical and Functional Quality Model, Grönroos (1984)

Synthesised model of service quality (Brogowicz *et al.*, 1990)

The synthesised model of service quality (Figure A5) takes into account three factors. These factors include: company image, external influences and traditional marketing activities.

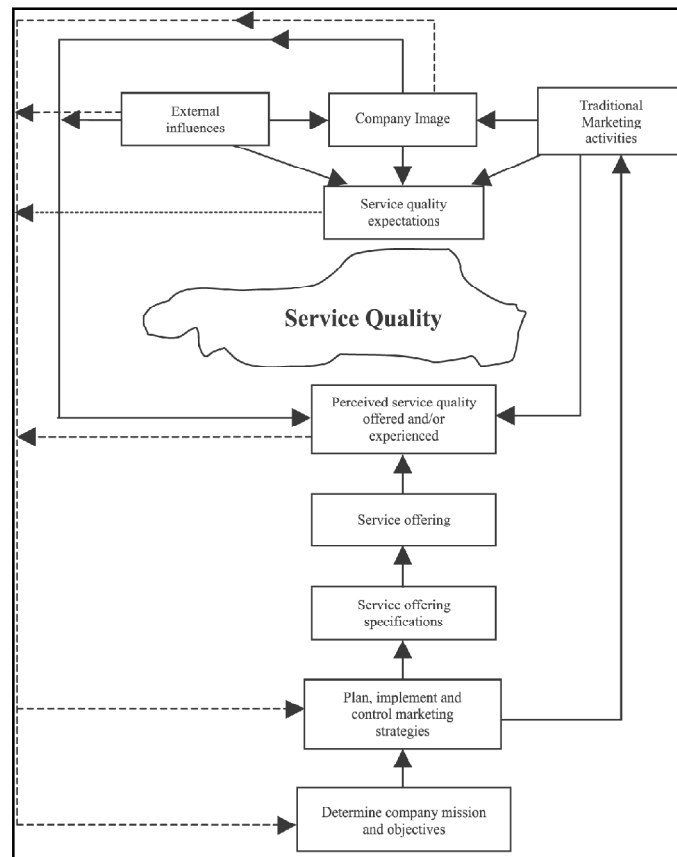


Figure A5: Synthesised model of service quality, Brogowicz *et al.* (1990)

Model of perceived service quality and satisfaction (Spreng and Mackoy, 1996)

The model emphasizes the effect of expectations, perceived performance desires, desired congruency and expectation disconfirmation on the overall service quality and customer satisfaction. These characteristics of the model are all measured by making use of the 10 characteristics of advising: convenience in making an appointment; friendliness of the staff; advisor listening to questions; the advisor providing accurate information; the knowledge of the advisor; the advice being consistent; advisor helping in long-range planning; the advisor aids in

choosing the right courses of action; advisor being interested in personal issues; and the offices being professionally laid out.

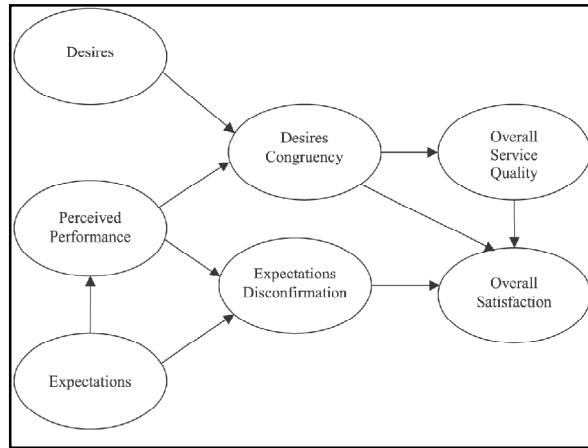


Figure A6: Model of perceived service quality and satisfaction, Spreng and Mackoy (1996)

Retail service quality and perceived value model (Sweeney *et al.*, 1997)

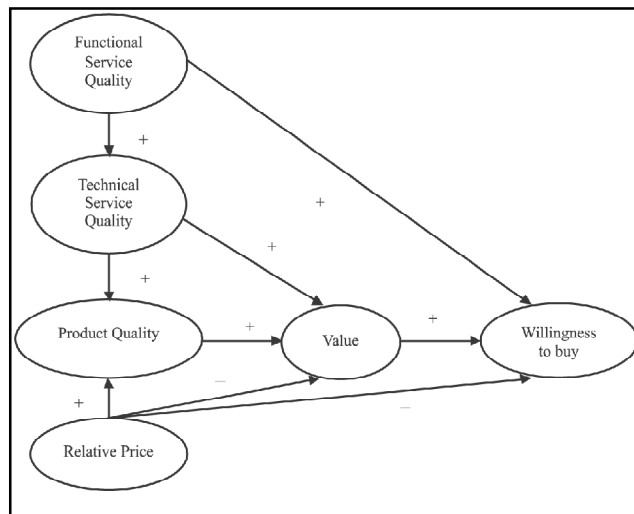


Figure A7: Retail service quality and perceived value model, Sweeney *et al.* (1997)

Service quality, customer value and customer satisfaction model (Oh, 1999)

In Figure A8, two points must be stated:

- The arrows shown in the model show casual directions.
- Word of mouth communication is understood as a direct and combined function of perceptions, value satisfaction and re-purchase intentions.

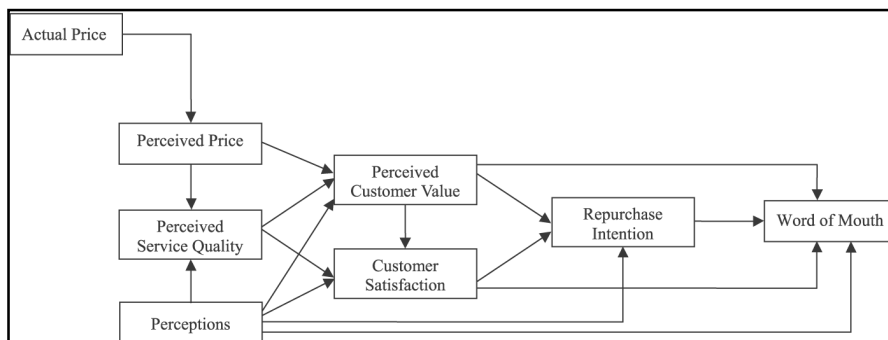


Figure A8: Service quality, customer value and customer satisfaction model, Oh, (1999)

9.1.3 Satisfaction Based Service Models

Ideal value model of service quality (Mattsson, 1992)

In this model represented by Figure A9, it can be seen that an implicit negative disconfirmation on a pre-conscious level is then hypothesized to determine satisfaction on a “higher” attitude level. This negative disconfirmation is the major determinant of consumer satisfaction. As a result, more attention should be provided to the cognitive processes by which customer’s service concepts are formed.

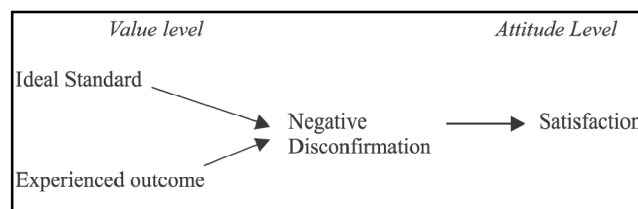


Figure A9: Ideal model for service quality, Mattsson (1992)

Model of perceived service quality and satisfaction (Spreng and Mackoy, 1996)

The model emphasizes the effect of expectations, perceived performance desires, desired congruency and expectation disconfirmation on the overall service quality and customer satisfaction. These characteristics of the model are all measured with the use of 10 characteristics of advising: convenience in making an appointment; friendliness of the staff; advisor listening to questions; the advisor providing accurate information; the knowledge of the advisor; the advice being consistent; advisor helping in long-range planning; the advisor aiding in choosing the right courses of action; advisor being interested in personal issues; and the offices being professional.

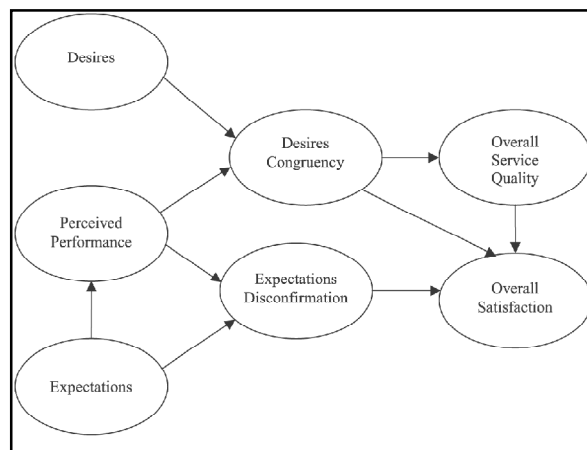


Figure A10: Model of perceived service quality and satisfaction, Spreng and Mackoy (1996)

PCP attribute model (Philip and Hazlett, 1997)

In this model the pivotal attributes (situated at the centre) are considered to be the most crucial factor as to why the customer selects a firm and these exercise the greatest effect on the levels of satisfaction. The pivotal attributes are defined as the “end product” or “output” from the service encounter i.e. what the customer expects to achieve and receive from his/her service experience.

The core attributes are focussed around the pivotal attributes as seen in Figure A11. These characteristics are a combination of the staff, systems and the service firm's organizational structure in order to receive a pivotal attribute.

The peripheral attributes are defined as the extras or additions which customers receive during the service experience. These peripheral characteristics make their experience with the firm even more pleasant.

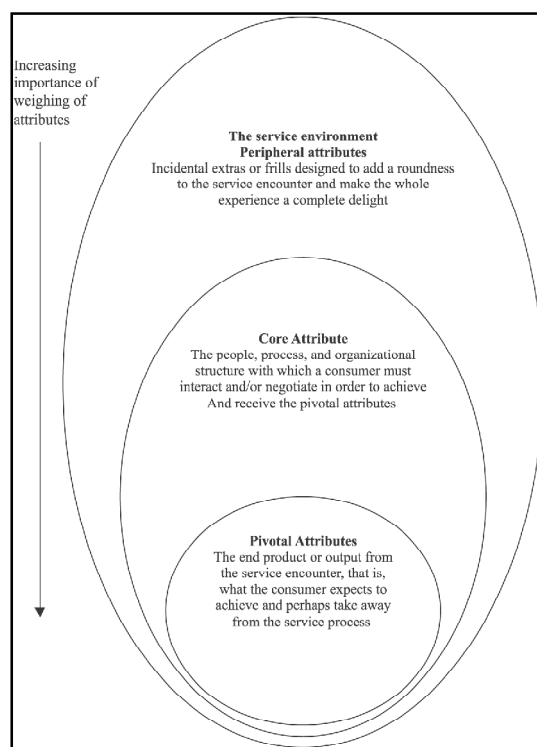


Figure A11: PCP Attribute Model, Philip and Hazlett (1997)

9.1.4 Technology Based Models

IT alignment model (Berkley and Gupta, 1994)

The first model is called the **IT Alignment Model** and was developed by Berkley and Gupta in 1994. In this model a link between the service and the information strategies of an organization is made. A description of how to use IT for improving service quality is offered. Case studies for

a variety of service sectors (banking, courier, transportation, manufacturing and service industries) are utilised. This model describes (in detail) where IT has been used or could be used to improve specific service quality dimensions. These aspects include reliability, responsiveness, competence, access, communications, security, understanding and knowing the customers.

From Figure A12, it can be seen that it is vital that service quality and information system (IS) strategies be tight, co-ordinated and aligned in this model. The model also suggests and details the process of aligning both service and strategies.

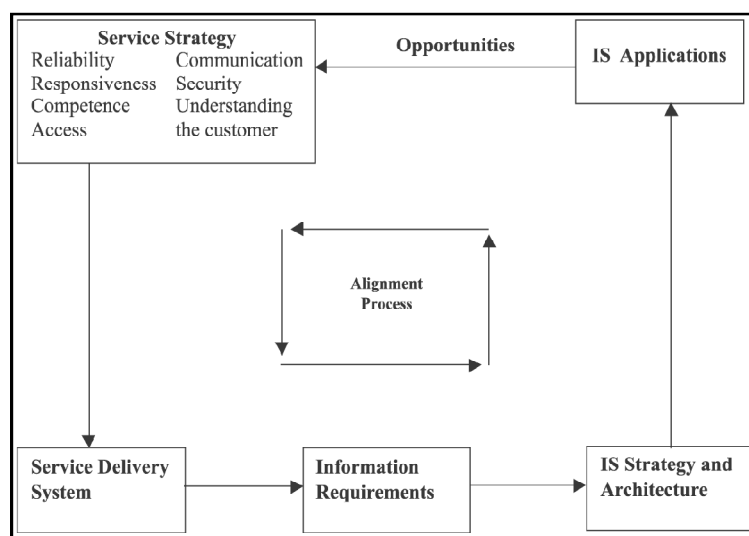


Figure A12: IT alignment model, Berkley and Gupta (1994)

Attribute and overall affect model (Dabholkar, 1996)

In the next model, the **Attribute and Overall Affect Model** developed by Dabholkar, in 1996, there are two alternatives models of service quality for technology-based self-service industries. Dabholkar (1996) believes that self-service industries are growing more popular due to the high cost of labour in the service industry.

The first model, the Attribute Based Model, is based on customers' expectations for a specific industry. It is based on the cognitive approach to decision making. This is where customers would use a compensatory process to evaluate attributes associated with this industry. This is

done to generate expectations of service quality. The second, the Overall Affect Model, is founded on the customer's feelings towards the use of technology. It is based on an emotional and subjective approach to decision making where the consumer's expectations to technology-based service would be based on the overall predispositions of each customer.

In both models, the expected service quality would influence intentions to use technology-based self-service industries. (Seth *et al.*, 2005)

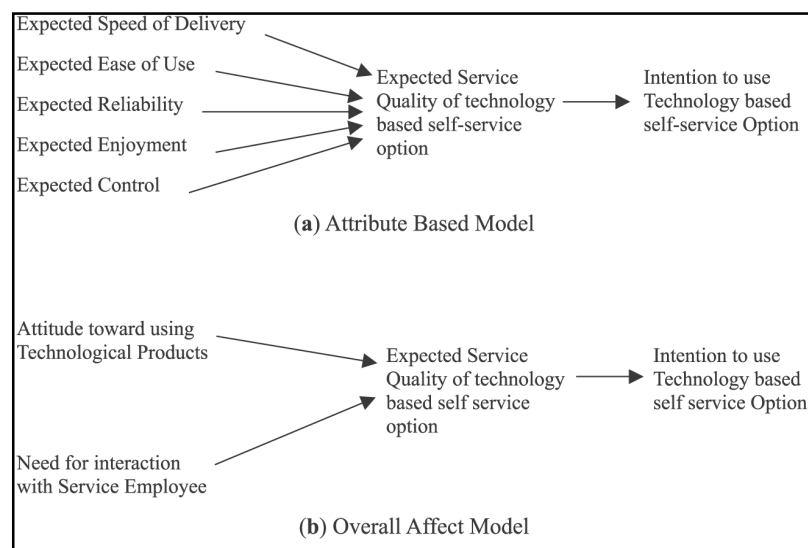


Figure A13: Attribute and Overall Effect Model, Dabholkar (1996)

Internal banking Model (Broderick and Vachirapornpuk, 2002)

The next model is called the **Internal Banking Model** and was developed by Broderick and Vachirapornpuk in 2002. With the expansion of the internet a new channel of service delivery has been created. This, has thus, changed the way firms interact with their customers. As a result of this fact this study proposes and tests a service quality model for internet banking. The UK internet community was used to gain a further understanding of how internet banking customers perceive elements of this model. Five elements were treated as central influences on the perceived service quality, these included: customer expectations of the service, the image and reputation of the service firm, aspects of the service setting, the actual service encounter, and customer participation.

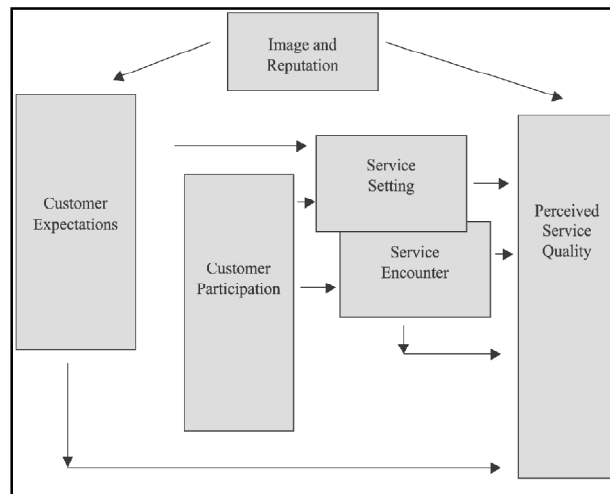


Figure A14: Internet Banking Model, Broderick and Vachirapornpuk (2002)

IT-based Model (Zhu *et al.*, 2002)

In the same year Zhu, Wyner and Chen developed the **IT-Based Model**. In this model the importance of Information Technology based service options is emphasised. Service firms are increasingly using IT to reduce costs and create value-added services for the customers. In this model of service quality a link between IT-based service options and traditional service dimensions is proposed. More specifically a look at the relationship between IT-based services and customers' perceptions of service quality is investigated. The IT-based service model is linked to service quality as measured by SERVQUAL (Parasuraman *et al.*, 1988, 1991). Various key factors affecting customer's views of IT-based services are shown in Figure A15.

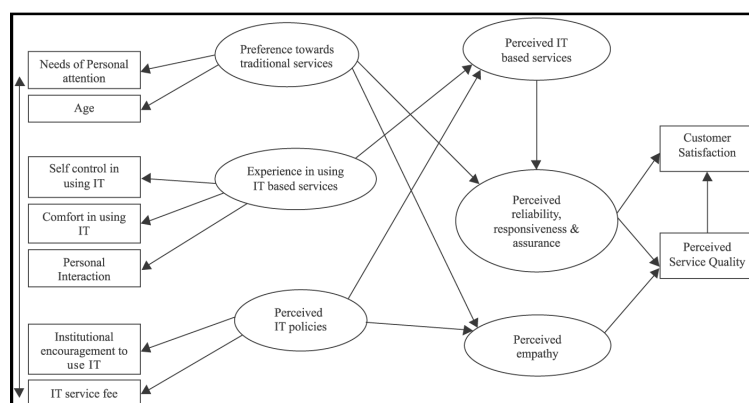


Figure A15: IT-based Model, Zhu *et al.* (2002)

Model of e-service quality (Santos, 2003)

In 2003, the **Model of e-Service Quality** was developed by Santos. E-service is defined as the function of service on the internet (Rust and Lemon, 2001). As a result, service quality is one of the fundamental factors in determining the success or failure of electronic commerce. In this study, a conceptual model of e-service quality and its determinants is presented. Santos believes that e-service quality can be split into two categories: incubative dimensions and active dimensions. **Incubative** dimensions refer to the design of the website and how technology is utilized to provide customers with easy access and understanding. **Active** dimensions refer to the reliability (frequency of updating); efficiency (downloading and searches) and support (user friendly guidelines and help page). These dimensions help increase hit rates, stickiness and customer retention. In Figure A16, a detailed breakdown of e-service quality is shown.

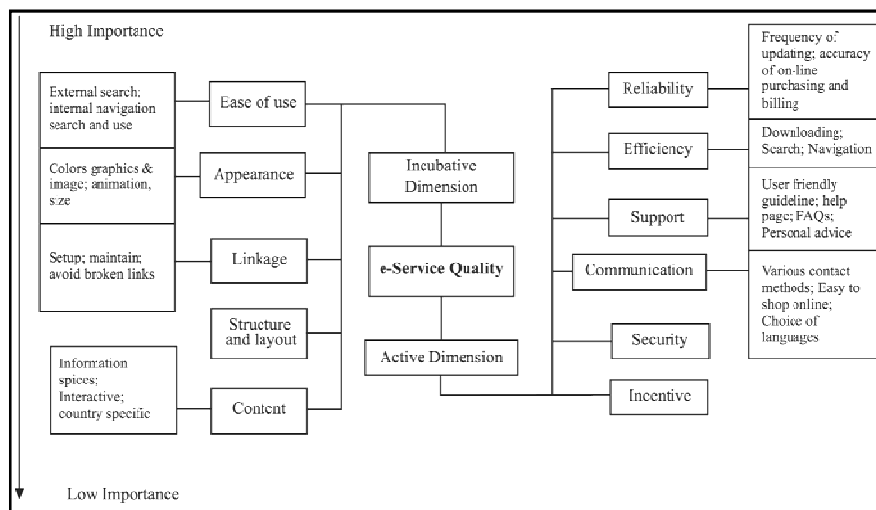


Figure A16: E-service quality model, Santos (2003)

9.1.5 Other Service Quality Models

Internal Service Quality DEA Model (Soteriou and Stavrinides, 2000)

The input minimization DEA model provides information about how much the consumable resources could be diminished even though the same level of service quality is being delivered,

while the output maximization DEA model will illustrate how much service quality can be improved by using the same consumable resources.

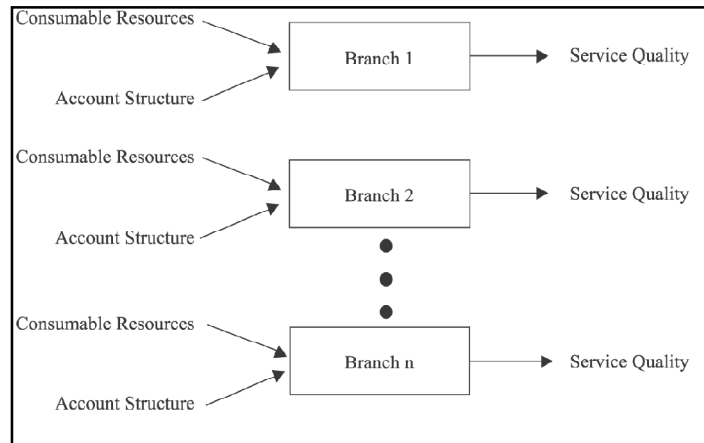


Figure A17: Internal Service Quality DEA Model, Soteriou and Stavrinides (2000)

9.2 Appendix B – Evaluated Performance and Normed Quality Model

This appendix contains the assumptions and formulas used in the Evaluated Performance and Normed Quality models discussed in Chapter 2.

With the assumptions and definitions stated in Chapter 2 being used as the foundation, the proposed probabilistic evaluated performance model of perceived quality is:

$$Q_i = -1 \left[\sum_{j=1}^m W_j \sum_{k=1}^{n_j} P_{ijk} |A_{jk} - I_j|^l \right] 1/l \quad (4)$$

Where:

Q_i is the individual's perceived quality object i . multiplying the right side of the equation by -1 results in larger values of Q_i being associated with higher levels of perceived quality

W_j is the importance of attribute j as a determinant of perceived quality

P_{ijk} is the perceived probability that object i has amount k of attribute j

A_{jk} is the amount k of attribute j

I_j is the ideal amount of attribute j as conceptualised in classic ideal point attitudinal models

m is the number of attributes

n_j is the number of "amount" categories of attribute j

l is the Minkowski space parameter

The proposed model shown above focuses on attributes that can be defined along quantitative continuums. If one then assumes l is equal to 1.0 the above model would become:

$$Q_i = -1 \left[\sum_{j=1}^m W_j \sum_{k=1}^{n_j} P_{ijk} |A_{jk} - I_j| \right] \quad (5)$$

In both the above models the perceived quality suggests that an individual's perceptions of the quality of the performance of object i is positively related to the weighted likelihood that the performance of object i on m performance dimensions is close to the individual's perceptions of optimal performance on the m dimensions.

The model implies that the perceived quality model of object i can be increased by:

1. closing the gap between object i 's performance and the ideal object performance on one or more of the m attributes
2. reducing the relative weights W_j for attributes characterised by large $|A_{ij} - I_j|$ gaps
3. increasing the relative weights W_j for attributes characterised by small $|A_{ij} - I_j|$ gaps
4. increasing the relative probabilities associated with the occurrence of small $|A_{ij} - I_j|$ gaps
5. decreasing the relative probabilities associated with the occurrence of large $|A_{ij} - I_j|$ gaps

There are many alternative perceived quality concepts and measures that can be derived from the above two equations with the use of various assumptions. An example of this is if one assumes that the individual evaluates object i with perceived certainty and that object i has a constant amount of each attribute, Equation 5 can be reduced to the following nonprobabilistic evaluated performance (EP) model of perceived quality:

$$Q_i = -1 \left[\sum_{j=1}^m W_j |A_{ij} - I_j| \right] \quad (6)$$

Where Q_i , W_j and I_j are defined earlier and A_{ij} is the individual's perceived amount of attribute j possessed by object i .

In the Normed Quality Model it is stated that if object i is defined as the excellence norm, which is the focus of the revised SERVQUAL expectation model (also developed by Teas), then equations 4, 5 or 6 can be used to define the perceived quality of the excellence norm Q_e in terms of the similarity between the excellence norm and the ideal object with respect to m

attributes. Therefore the quality of another object i Q_i relative to the quality of the excellence norm can be represented as the “norm quality gap”:

$$NQ_i = [Q_i - Q_e] \quad (7)$$

where Q_i is defined earlier in Equation 1 and

NQ is the Normed Quality Index for object i

Q_e is the individual's perceived quality of the excellence norm object.

If the excellence norm is found to be equal to the ideal object in Equation 4 then Q_e will be equal to zero and, as a result, the normed quality (NQ_i) would be equal to the perceived quality.

9.3 Appendix C – Past Applications of SERVQUAL

In this Appendix past applications and reapplications of SERVQUAL are presented. All the studies have been placed in chronological order

Table C1: Past Applications of SERVQUAL (Asubonteng *et al.*, 1996)

Study	Parasuraman <i>et al.</i> (1985, 1988)	Carman (1990)	Finn and Lamb (1991)	Babakus and Mangold (1992)
Data collection study sample(s)	Customer of telephone companies, securities brokerage, insurance companies, banks and repair and maintenance	Customers of a dental school patient clinic, a business school placement center, a tyre store and a hospital	Customers of four retail store types: stores like kMart, WalMart, etc., JC Penney, Sears, etc., Dillards, foley's, etc. and Saks, Neimann-Marcus, etc.	Customers of a hospital
Sample size	Ranged from 298 to 487 across companies	Ranged from 74 to 600+ across settings	Ranged from 58 to 69 across settings	443
Questionnaire format	Similar to PZB (1988) format	Similar to PZB (1988) in the placement center	Similar to PZB (1988)	Similar to PZB (1988)
Major wording changes	Negatively worded questions	No major changes in the SERVQUAL items retained, however, several of the items added were transaction-specific (rather than general attitude statements as in the original SERVQUAL)	No major changes	Negatively worded questions changes to form a positive form
Original SERVQUAL item retained	22 items	Ranged from 10 to 17 across settings	All 22 items	15 pairs of matching expectation-perception items
Response Scale	Seven-point scale	Seven-point scale	Five-point scale	Five-point scale
Questionnaire administration	Mail survey	Self-administered by respondent on-site	Telephone survey	Mail survey
Data analysis Procedure for assessing factor-structure	Principle-axis factor analysis followed by oblique rotation	Principle-axis factor analysis followed by oblique rotation	LISREL confirmatory factor analysis of five-dimensional measurement model	Principle-axis factor analysis followed by oblique rotation; LISREL confirmatory

Study	Parasuraman <i>et al.</i> (1985, 1988)	Carman (1990)	Finn and Lamb (1991)	Babakus and Mangold (1992)
Basis for initial number of factors extracted	PZB's (1988) Five dimensional structure	Factors with eigenvalues greater than 1	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure
Reliability co-efficients (Cronbach's alpha)	0.87-0.90	Mean 0.75 (across 35 Scales derived through factor analysis)	0.59-0.83	0.89-0.97
Final Number of Dimensions	Five	Between six and eight dimensions depending on setting	LISREL model fit for five dimensional structure poor (no alternative factor structure examined)	Not clear five-dimensional structure factor; LISREL fit poor
Validity	Convergent - Q (i.e. P - E) scores on the five dimensions explain 0.57-0.71 of variance in overall quality on a ten-point scale. Concurrent - Q scores related to hypothesized to presence of service quality	Not examined	Not examined	Not examined

Table C2: Past Applications of SERVQUAL (Asubonteng *et al.*, 1996)

Study	Babakus and Boller (1992)	Headley and Miller (1993)	Bowers <i>et al.</i> (1994)	Lytle and Mokwa (1992)
Data collection study sample(s)	Customers of an electric and gas utility company	Customers of medical services	Patients of an army hospital	Customers of health-care (fertility) services
Sample size	689	159 usable pre- and post- encounter responses, 11 primary care physicians	298	559
Questionnaire format	Similar to PZB (1988)	Similar to PZB (1988)	Similar to PZB (1988)	Similar to PZB (1988)
Major wording changes	No major changes	No major changes, except for languages necessary to switch between a generic provider reference and a specific provider of medical services	No major changes	No major changes, except for language changes and several items added
Original SERVQUAL item retained	All 22 items	All 22 items	All 22 items, as well as items in Carinf and Outcomes	15 pairs of matching expectation-perception items
Response Scale	Seven-point scale	Seven-point scale	Seven-point scale	Five-point scale
Questionnaire administration	Mail survey	Mail survey	Mail survey	Mail survey
Data analysis Procedure for assessing factor-structure	Principle-axis factor analysis followed by oblique rotation; LISREL confirmatory	Principle-axis factor analysis followed by oblique rotation; LISREL confirmatory	Regression Analysis	Principle-axis factor analysis followed by oblique rotation; LISREL confirmatory
Basis for initial number of factors extracted	PZB's (1988) five-dimensional structure	Factors with eigenvalues of 1 or greater	Not examined	Factors with eigenvalues greater than 1
Reliability co-efficients (Cronbach's alpha)	0.67-0.83	0.58-0.77	Not examined	Overall high mean scores for the observable variables
Final Number of Dimensions	Not clear	Six	Five	Seven
Validity	Convergent - total Q scores (across all 22-items) correlates 0.59 with overall quality scores on a four-point scale. Concurrent - correlations of Q and P scores with satisfactory complaint solution are 0.58 and 0.6	Not examined	Not examined	Not examined

Table C3: Past Applications of SERVQUAL (Asubonteng *et al.*, 1996)

Study	Cronin and Taylor (1992)	Brensinger and Lambert (1990)	O'Connor <i>et al.</i> (1994)	McAlexander <i>et al.</i> (1994)
Data collection study sample(s)	Customers of banking, pest control, dry cleaning and fast food	Purchasers of motor carrier services	Entire medical staff, administrative staff, patient-contact employees, and established adult patients of a physician-owned multispecialty group medical clinic	Patients of two independent general dental offices
Sample size	660	170	775	346
Questionnaire format	Similar to PZB (1988)	Similar to PZB (1988)	Similar to PZB (1988)	Similar to PZB (1988) format and Cronin and Taylor (1992)
Major wording changes	No major changes, except normative expectation measure used for 22-attribute (what "should b")	No major changes	No major changes	No major changes
Original SERVQUAL item retained	All 22 items	All 22 items	22 items	All 22 items
Response Scale	Seven-point semantic different scale	Seven-point scale	Seven-point scale	Seven-point scale
Questionnaire administration	In-home personal interviews	Mail survey	Mail survey	Mail survey
Data analysis Procedure for assessing factor-structure	Principal-axis factor analysis followed by oblique rotation: LISREL confirmatory	Principal-axis factor analysis followed by oblique rotation	Canonical discriminant functions	LISREL
Basis for initial number of factors extracted	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure
Reliability co-efficients (Cronbach's alpha)	0.74-0.83	0.64-0.88	0.79-0.92	0.82 SERVQUAL to 0.91 SERVPERF
Final Number of Dimensions	Five	Five	Five	Ten
Validity	Not examined	Convergent - Q scores on the five dimensions explain: 0.39 of variance in four-point overall quality scale	Not examined	Not examined

Table C4: Past Applications of SERVQUAL (Asubonteng *et al.*, 1996)

Study	Taylor and Cronin (1994)	Walbridge and Delene (1993)	Licata <i>et al.</i> (1995)	Clow <i>et al.</i> (1995)
Data collection study sample(s)	Individuals in shopping malls who had used hospital services within the last 45 days	Physicians on staff at two major teaching hospitals	Patients, primary care physicians, and specialist physicians of a large regional hospital	Households who had used dental services recently
Sample size	116 Study 1 227 Study 2	212	558	240
Questionnaire format	Similar to PZB (1988) format	Similar to PZB (1998) format	Similar to PZB (1998) format	Similar to PZB (1998) format
Major wording changes	Modified slightly to reflect health care setting	Two other determinants were added to SERVQUAL items: core medical services and professionalism skills	Modified slightly to reflect health care setting	No major changes
Original SERVQUAL item retained	22 items	22 items	15 pairs of matching expectation-perception items	All 22 items
Response Scale	Seven-point Likert scale	Ten-point scale	Five-point scale	Seven-point Likert scale
Questionnaire administration	Personal interviews	Mail survey	Mail survey	Mail survey
Data analysis Procedure for assessing factor-structure	Factor analysis followed by oblique rotation, two-stage least square	Tabulations + t-tests, analysis of variance, reliability test and correlations were conducted	One-way ANOVA, principal components factor analysis using varimax rotation MANOVA	LISREL
Basis for initial number of factors extracted	Five factors of expectation scale and four factors of performance scale	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure	PZB's (1988) five-dimensional structure
Reliability co-efficients (Cronbach's alpha)	0.74-0.96 (Study 1) 0.71-0.93 (Study 2)	0.53-0.74	0.43-0.73	0.72-0.89
Final Number of Dimensions	Five	Five from PZB, two from Hatwood-Fourmer (1988) and Swartz and Brown (1988)	12	Seven
Validity	Not examined	Not examined	Not examined	Not examined

Table C5: Past Applications of SERVQUAL (Asubonteng *et al.*, 1996)

Study	Fusilier and Simpson (1995)	Bebko and Garg (1995)	Kwei and Snaddon (2005)
Data collection study sample(s)	AIDS patients, social workers, and family members, who were involved with the hospitalizations and had observed the nursing care provided	Patients in hospital nursing units	South African service dealerships
Sample size	27	262	90 Customers 30 Front Line Staff
Questionnaire format	Similar to PZB (1998) format	Similar to PZB (1998) format	Similar to PZB (1998) format
Major wording changes	No major changes	No major changes	No major changes
Original SERVQUAL item retained	22 items	22 items	22 items
Response Scale	Seven-point scale	Seven-point scale	Seven-point scale
Questionnaire administration	Self-administered by respondent on-site	Personal interviews	Personal interviews
Data analysis Procedure for assessing factor-structure	Tapes and notes were transcribed for coding	Loglinear model-difference between perceived and actual bell response (means and t-test)	
Basis for initial number of factors extracted	PZB's (1988) five-dimensional structure	Not clear	
Reliability co-efficients (Cronbach's alpha)	Interrater agreement was 0.99	Mean 0.69-317.29	Varied from 0.59 to 0.8
Final Number of Dimensions	Five	Not Clear	Five
Validity	Not examined	Not examined	Not examined

9.4 Appendix D – Survey Used

Attached to this appendix is a copy of the survey used when collecting data during visits to the 13 dealerships.

Customer Satisfaction Survey

The following survey is a study of Customer Satisfaction in the Service Motor Industry. In this survey there are 44 questions. These questions measure your levels of perception and your expectations of the particular Service Dealership. The Survey will take approximately 20 minutes to complete.

All information in this questionnaire will be kept confidential.

In the questions asked, the ranking of services provided by the dealerships range from 1 (Strongly Disagree) to 7 (Strongly Agree). Please select the one you feel is most appropriate to your Service Dealership.

Is this your first visit to this Dealership?

Yes No

What is the name of this Dealer?

In which city/town/suburb do you live?

Do you work in the service industry?

Yes No

If yes, please specify.

Into which age group do you fall?

< 25 25 - 34 35 - 44 45 - 54 >55

END OF PART I

Q1 Excellent service dealers will have modern-looking equipment.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

Q2 The physical facilities at excellent service dealers will be visually appealing.

1 2 3 4 5 6 7

Q3 Employees at excellent service dealers will be neat in appearance.

1 2 3 4 5 6 7

Q4 Materials associated with the service (such as pamphlets or statements) will be visually appealing in an excellent service dealer.

1 2 3 4 5 6 7

Q5 When excellent service dealers promise to do something by a certain time, they will do so.

1 2 3 4 5 6 7

Q6 When a customer has a problem, excellent service dealers will show a sincere interest in solving it.

1 2 3 4 5 6 7

Q7 Excellent Service Dealers will perform the service right the first time.

1 2 3 4 5 6 7

Q8 Excellent service dealers will provide their services at the time they promise to do so.

1 2 3 4 5 6 7

Q9 Excellent service dealers will insist on error-free records.

1 2 3 4 5 6 7

Q 10 Employees of excellent service dealers will tell customers exactly when services will be performed.

1 2 3 4 5 6 7

Q 11 Employees of excellent service dealers will give prompt service to the customers.

1 2 3 4 5 6 7

Q 12 Employees of excellent service dealers will always be willing to help customers.

1 2 3 4 5 6 7

Q 13 Employees of excellent service dealers will never be too busy to respond to a customer's request.

1 2 3 4 5 6 7

Q 14 The behaviour of employees at excellent service dealers will instil confidence in customers.

1 2 3 4 5 6 7

Q 15 Customers of excellent service dealers will feel safe as they deal with their transactions.

1 2 3 4 5 6 7

Q 16 Employees of excellent service dealers will be consistently courteous to customers.

1 2 3 4 5 6 7

Q 17 Employees of excellent service dealers will have the knowledge to answer customer's questions.

1 2 3 4 5 6 7

Q 18 Excellent service dealers will give customers individual attention.

1 2 3 4 5 6 7

Q 19 Excellent service dealers will have operating hours convenient to all their customers.

1 2 3 4 5 6 7

Q 20 Excellent service dealers will have employees who give customers personal attention.

1 2 3 4 5 6 7

Q 21 Excellent service dealers will have the customer's best interests at heart.

1 2 3 4 5 6 7

Q 22 The employees of excellent service dealers will understand the specific needs of their customers.

1 2 3 4 5 6 7

Listed below are five aspects pertaining to the Dealership's and the services they offer. The purpose of this section is to ascertain how important each of these aspects is to you, the client, when you evaluate the quality of service. Please allocate a total of 100 points among the five aspects according to how important each aspect is to you - the more important an aspect is to you, the more points you should allocate to it. Please ensure that the points you assign to the five features add up to 100.

1 The appearance of the Dealership's physical facilities, equipment, personnel and communication materials.

2 The Dealership's ability to perform the promised service dependably and accurately.

3 The Dealership's willingness to help customers and provide prompt service.

4 The knowledge and courtesy of the Dealership's employees and their ability to convey trust and confidence.

5 The caring, individualized attention the Dealerships provide its customers.

TOTAL

100

END OF PART II

Q1 My service dealer has modern-looking equipment.

1 Strongly Disagree 2 3 4 5 6 7 Strongly Agree

Q2 The physical facilities are visually appealing in my service dealer.

1 2 3 4 5 6 7

Q3 Employees at my service dealer are neat in appearance.

1 2 3 4 5 6 7

Q4 Materials associated with the service (such as pamphlets or statements) are visually appealing at my service dealer.

1 2 3 4 5 6 7

Q5 When my service dealer promises to do something by a certain time, it does so.

1 2 3 4 5 6 7

Q6 When a customer has a problem, my service dealer shows a sincere interest in solving it.

1 2 3 4 5 6 7

Q7 My service dealer performs the service right the first time.

1 2 3 4 5 6 7

Q8 My service dealer provides its service at the time it promises to do so.

1 2 3 4 5 6 7

Q9 My service dealer insists on error-free records.

1 2 3 4 5 6 7

Q 10 Employees at my service dealer tell the customer when services will be performed.

1 2 3 4 5 6 7

Q 11 Employees at my service dealer give prompt service to customers.

1 2 3 4 5 6 7

Q 12 Employees at my service dealer are always willing to help customers.

1 2 3 4 5 6 7

Q 13 Employees at my service dealer are never too busy to respond to customer's request.

1 2 3 4 5 6 7

Q 14 The behaviour of employees at my service dealer instills confidence in customers.

1 2 3 4 5 6 7

Q 15 Customers of my service dealer feel safe as they deal with their transactions.

1 2 3 4 5 6 7

Q 16 Employees at my service dealer are consistently courteous with customers.

1 2 3 4 5 6 7

Q 17 Employees at my service dealer have the knowledge to answer a customer's questions.

1 2 3 4 5 6 7

Q 18 My service dealer gives customers individual attention.

1 2 3 4 5 6 7

Q 19 My service dealer has operating hours convenient to all its customers.

1 2 3 4 5 6 7

Q 20 My service dealer has employees who give you personal attention.

1 2 3 4 5 6 7

Q 21 My service dealer has the customer's best interest at heart.

1 2 3 4 5 6 7

Q 22 The employees of my service dealer understand the specific needs of their customers.

1 2 3 4 5 6 7

Thank you for taking the time to fill out the above survey. Your contribution will help improve Customer Satisfaction in your Service Dealership. If you would like to comment on the survey please email any suggestions to customer.sat@gmail.com.

9.5 Appendix E – Pilot Survey Call List

All the calls made to the various customers during the pilot survey and a breakdown of what occurred in each call is presented in this Appendix.

Table E1: Pilot Survey Call List

Customer Number	Yes	No	No Answer	Fax	Wrong Number	Date E-mail Sent	Date E-mail Received	Days Difference	Comments
Customer 1	1					2007/08/31			
Customer 2			1						
Customer 3			1						
Customer 4	1					2007/08/31	2007/09/04	4	
Customer 5	1					2007/08/31			
Customer 6	1					2007/08/31			
Customer 7	1					2007/08/31			
Customer 8	1					2007/08/31	2007/09/03	3	
Customer 9		1							
Customer 10				1					
Customer 11			1						
Customer 12	1					2007/08/31			
Customer 13	1					2007/08/31			
Customer 14	1					2007/08/31			
Customer 15			1						
Customer 16	1					2007/08/31			
Customer 17			1						
Customer 18			1						
Customer 19			1						
Customer 20	1					2007/08/31			
Customer 21	1					2007/08/31			
Customer 22	1					2007/08/31			
Customer 23		1							
Customer 24	1					2007/08/31			
Customer 25	1					2007/08/31	2007/08/31	0	
Customer 26	1					2007/09/13	2007/09/13	0	
Customer 27		1							
Customer 28	1					2007/09/17	2007/09/28	11	
Customer 29			1						
Customer 30			1						
Customer 31	1					2007/08/31	2007/08/31	0	

Customer 32	1					2007/08/31	2007/08/31	0	
Customer 33			1						
Customer 34			1						
Customer 35	1					2007/08/31			
Customer 36	1					2007/08/31			
Customer 37	1					2007/08/31	2007/08/31	0	
Customer 38	1					2007/08/31	2007/09/03		E-mail Sending Error
Customer 39					1				
Customer 40			1						
Customer 41			1						
Customer 42			1						
Customer 43	1					2007/09/03			
Customer 44	1					2007/09/03			E-mail Sending Error
Customer 45			1						
Customer 46			1						
Customer 47	1					2007/09/03			
Customer 48					1				
Customer 49					1				
Customer 50			1						
Customer 51			1						
Customer 52	1					2007/09/03			
Customer 53					1				
Customer 54			1						
Customer 55			1						
Customer 56			1						
Customer 57					1				
Customer 58			1						
Customer 59			1						
Customer 60		1							
Customer 61	1					2007/09/05			E-mail Sending Error
Customer 62			1						
Customer 63			1						
Customer 64			1						
Customer 65			1						
Customer 66	1					2007/09/17	2007/09/25	8	
Customer 67			1						
Customer 68	1					2007/09/05			
Customer 69			1						
Customer 70			1						
Customer 71			1						
Customer 72			1						

Customer 73					1				
Customer 74	1					2007/09/05			
Customer 75	1					2007/09/05			
Customer 76					1				
Customer 77			1						
Customer 78			1						
Customer 79					1				
Customer 80					1				
Customer 81			1						
Customer 82			1						
Customer 83			1						
Customer 84			1						
Customer 85		1							
Customer 86		1							
Customer 87			1						
Customer 88			1						
Customer 89	1					2007/09/05			
Customer 90	1					2007/09/05			
Customer 91			1						
Customer 92		1							
Customer 93			1						
Customer 94		1							
Customer 95			1						
Customer 96	1					2007/09/05			E-mail Sending Error
Customer 97					1				
Customer 98			1						
Customer 99	1					2007/09/05			
Customer 100			1						
Customer 101			1						
Customer 102	1					2007/09/05			
Customer 103	1					2007/09/05			
Customer 104		1							
Customer 105	1					2007/09/05			
Customer 106	1					2007/09/05	2007/09/05	0	
Customer 107	1					2007/09/05			
Customer 108			1			2007/09/13			
Customer 109			1						
Customer 110			1						
Customer 111	1					2007/09/05			
Customer 112				1					
Customer 113	1					2007/09/17	2007/09/19	2	

Customer 114			1						
Customer 115	1					2007/09/05			
Customer 116	1					2007/09/05	2007/09/06	1	
Customer 117			1						
Customer 118	1					2007/09/13			
Customer 119	1					2007/09/14			
Customer 120			1						
Customer 121		1							
Customer 122	1					2007/09/14	2007/09/17	3	
Customer 123			1						
Customer 124	1					2007/09/14			
Customer 125	1					2007/09/14			
Customer 126			1						
Customer 127			1						
Customer 128	1					2007/09/14			
Customer 129	1					2007/09/14	2007/09/17	3	
Customer 130			1						
Customer 131			1						
Customer 132			1						
Customer 133	1					2007/09/17	2007/09/18	1	
Customer 134	1					2007/09/14			
Customer 135			1						
Customer 136			1						
Customer 137					1				
Customer 138			1						
Customer 139					1				
Customer 140	1					2007/09/14	2007/09/14	0	
Customer 141			1						
Customer 142			1						
Customer 143			1						
Customer 144			1						
Customer 145			1						
Customer 146	1					2007/09/14			
Customer 147			1						
Customer 148			1						
Customer 149	1					2007/09/14			
Customer 150			1						
Customer 151	1					2007/09/14			
Customer 152	1					2007/09/14			
Customer 153			1						
Customer 154					1				

Customer 155	1					2007/09/14	2007/09/18	4	
Customer 156		1							
Total	60	11	70	3	12				
	Yes	No	No Answer	Fax	Wrong Number				
Percentage	38	7	45	2	8	100			

9.6 Appendix F – Dealership Customer Data

In the following Appendix all the data collected from the Customers, while at the various dealerships is included. This data contains the Customers' Personal Details, Customers' Expectations Score, Customers' Importance Weighting Scores and Customers' Perceptions Scores. Each table indicates the Dealership whose data is being displayed.

Tables for Dealership A also contain the column numbering assigned to each of the four types of data tables for each Dealership. This numbering is used when referring to a data set in Chapter 5.

Table F1: Personal Details for Customers at Dealership A

DEALERSHIP A					
Personal Details					
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	Yes	Germiston	Yes	Cellular Industry	35-44
Customer 2	No	Soweto	Yes	Food & Beverage	25-34
Customer 3	Yes	Roodepoort	No		45-54
Customer 4	No	Eldorado Park	No		35-44
Customer 5	No	Randburg	No		25-34
Customer 6	No	Boksburg	No		<25
Customer 7	No	Midrand	Yes	Consultant	35-44
Customer 8	No	Randburg	No		45-54
Customer 9	No	Auckland Park	Yes	Broadcasting	45-54
Customer 10	No	Bryanston	Yes	IT	<25
Customer 11	No	Soweto	No		25-34
Customer 12	No	Kempton Park	No		35-44
Customer 13	No	Germiston	No		35-44
Customer 14	No	Glenvista	Yes	Co-ordinator	45-54
Customer 15	No	Henley on Klip	Yes	AA Autobody	45-54
Customer 16	Yes	Alberton	No		25-34
Customer 17	No	Saxonwold	No		35-44
Customer 18	Yes	Liefde en Vrede	Yes	SABC	35-44
Customer 19	No	Mulbarton	Yes	Area Development Service	25-34
Customer 20	No	Florida	No		45-54
Customer 21	No	Springs	No		45-54

Customer 22	No	Randburg	No		25-34
Customer 23	No	Sandton	Yes	Call centres	45-54
Customer 24	Yes	Centurion	No		35-44
Customer 25	No	Elandspark	Yes		25-34
Customer 26	No	Leondale	No		25-34
Customer 27	No	Kempton Park	No		35-44
Customer 28	Yes	Ormonde	No		<25
Customer 29	Yes	Weltevreden Park	Yes	Insurance	35-44
Customer 30	No	Midrand	No		25-34
Customer 31	No	Norwood	Yes	Financial Services	35-44
Customer 32	Yes	Houghton	No		<25
Customer 33	No	Witbank	No		35-44
Customer 34	No	Johannesburg	Yes	Consultant	35-44
Customer 35	No	Boksburg	Yes	Meat Industry	35-44
Customer 36	Yes	Protea Glen	No		25-34
Customer 37	No	Randpark Ridge	No		25-34
Customer 30	No	Midrand	No		25-34
Customer 31	No	Norwood	Yes	Financial Services	35-44
Customer 32	Yes	Houghton	No		<25
Customer 33	No	Witbank	No		35-44
Customer 34	No	Johannesburg	Yes	Consultant	35-44
Customer 35	No	Boksburg	Yes	Meat Industry	35-44
Customer 36	Yes	Protea Glen	No		25-34
Customer 37	No	Randpark Ridge	No		25-34

Table F2: Expectation Scores for Customers at Dealership A

DEALERSHIP A																						
Expectation Measurement																						
	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14	Col. 15	Col. 16	Col. 17	Col. 18	Col. 19	Col. 20	Col. 21	Col. 22	Col. 23
Customer	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 2	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	7
Customer 3	7	7	7	5	7	7	7	7	7	7	6	7	7	6	7	6	7	6	6	6	7	7
Customer 4	7	6	7	7	6	7	7	7	7	7	6	7	7	6	7	7	7	7	7	7	6	7
Customer 5	6	6	7	7	7	7	6	7	6	5	6	6	7	6	7	7	7	7	6	7	7	6
Customer 6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7
Customer 7	5	7	7	6	5	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	6
Customer 8	6	6	6	6	7	7	7	7	7	6	6	7	7	6	6	7	7	5	6	6	7	6
Customer 9	4	4	6	6	5	5	6	4	6	5	6	7	6	6	7	6	6	5	5	5	5	6
Customer 10	6	6	5	6	4	6	6	4	6	6	6	6	7	7	6	6	7	5	1	6	7	6
Customer 11	5	6	7	6	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	7	7	7	7	7	6	7	7	6	2	6	5	5	6	6	6	6	6	6	6	6	6
Customer 13	5	4	5	3	7	7	7	7	7	6	6	7	6	6	7	7	7	6	5	6	7	6
Customer 14	7	6	6	7	7	7	6	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7
Customer 15	6	6	6	5	6	6	6	6	6	7	7	6	6	6	6	7	7	7	6	6	7	7
Customer 16	7	6	7	6	7	7	6	7	5	7	6	6	6	6	6	6	6	6	6	6	6	6
Customer 17	6	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6	7	7	6
Customer 18	5	5	4	4	5	4	4	5	5	5	4	4	5	4	5	5	6	6	7	4	7	7
Customer 19	6	6	7	5	5	6	6	4	4	5	4	5	3	6	6	7	7	5	4	5	5	6
Customer 20	7	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 21	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Customer 22	6	6	6	5	7	7	4	7	4	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 23	6	5	6	5	7	7	7	7	6	6	6	7	7	7	7	6	7	7	7	7	7	7
Customer 24	5	6	6	7	6	6	7	7	7	7	7	7	6	6	6	7	7	7	6	7	7	6
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	5	4	6	5	6	6	7	7	5	5	6	6	6	5	6	5	6	6	5	7	6	6
Customer 27	7	7	7	6	6	6	7	7	7	6	7	7	7	6	6	6	7	7	7	7	7	6
Customer 28	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	6	6	6	5	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6
Customer 30	6	6	6	5	6	7	7	7	7	6	7	5	4	5	6	6	6	4	6	5	5	6
Customer 31	6	6	6	6	7	7	6	6	7	6	6	7	6	7	7	7	7	7	6	6	6	6
Customer 32	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	5	5	7	5
Customer 33	6	6	7	6	7	6	7	7	6	7	7	6	6	7	6	7	6	7	7	7	6	7
Customer 34	6	5	6	4	6	7	7	5	4	6	5	6	4	6	7	6	4	6	7	5	3	6
Customer 35	4	4	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 36	7	6	7	6	7	6	6	7	5	6	6	7	7	6	7	7	7	6	6	6	7	6
Customer 37	3	3	4	4	7	7	7	7	6	7	7	7	7	6	7	7	7	7	7	7	7	6

Table F3: Importance Weighting Scores for Customers at Dealership A

DEALERSHIP A					
Importance Weightings					
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	20	20	20	20	20
Customer 2	20	50	5	20	5
Customer 3	20	20	20	20	20
Customer 4	10	18	22	25	25
Customer 5	10	10	30	40	10
Customer 6	20	40	20	10	10
Customer 7	20	20	20	20	20
Customer 8	10	30	20	30	10
Customer 9	25	30	25	10	10
Customer 10	30	50	5	10	5
Customer 11	20	20	20	20	20
Customer 12	20	20	20	20	20
Customer 13	10	30	30	20	10
Customer 14	25	30	17.5	10	17.5
Customer 15	20	20	20	20	20
Customer 16	10	30	25	25	10
Customer 17	10	30	20	20	20
Customer 18	30	40	15	10	5
Customer 19	30	40	20	5	5
Customer 20	5	10	5	30	50
Customer 21	10	20	20	20	30
Customer 22	20	20	20	20	20
Customer 23	10	60	10	10	10
Customer 24	20	20	20	20	20
Customer 25	20	20	20	20	20
Customer 26	10	50	20	10	10
Customer 27	30	10	10	10	40
Customer 28	5	60	10	20	5
Customer 29	20	30	15	20	15
Customer 30	10	30	20	10	30
Customer 31	5	50	20	10	15
Customer 32	5	65	5	20	5
Customer 33	20	30	10	30	10
Customer 34	7.5	7.5	7.5	7.5	70
Customer 35	0	25	0	0	75
Customer 36	20	20	20	20	20
Customer 37	5	30	25	20	20

Table F4: Perception Scores for Customers at Dealership A

DEALERSHIP A																						
Perception Measurement																						
	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14	Col. 15	Col. 16	Col. 17	Col. 18	Col. 19	Col. 20	Col. 21	Col. 22	Col. 23
Customer	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	5	5	6	6	6	4	4	6	4	6	6	6	6	6	6	6	7	7	6	7	6	6
Customer 2	4	5	4	4	5	5	5	5	6	4	5	5	5	4	5	5	6	5	6	5	5	5
Customer 3	6	6	7	5	7	7	6	7	6	7	7	7	7	7	6	7	6	7	7	7	7	7
Customer 4	7	7	7	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	6	7	7	5	4	6	6	5	4	5	6	6	6	6	7	6	7	7	7	7	6	5
Customer 6	4	4	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 7	5	4	5	5	3	3	5	5	4	1	4	1	1	2	4	3	2	5	6	2	3	4
Customer 8	4	6	5	5	6	6	2	5	5	3	6	6	6	6	6	6	6	6	6	6	6	6
Customer 9	7	7	7	3	4	5	5	4	4	5	5	6	6	6	6	6	7	7	6	6	3	5
Customer 10	5	6	7	6	1	5	1	1	4	7	7	5	7	7	4	7	7	6	1	7	4	6
Customer 11	7	6	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	5	5	5	5	5	5	5	5	5	3	5	5	5	5	6	7	6	6	6	6	6	6
Customer 13	6	6	7	4	7	7	7	7	7	3	7	7	7	6	7	7	4	6	6	7	7	7
Customer 14	6	5	6	6	7	7	6	7	7	7	7	7	6	7	6	6	7	7	7	7	7	7
Customer 15	7	7	7	6	6	6	6	6	7	7	7	7	7	6	6	6	7	7	6	6	7	7
Customer 16	7	6	6	6	7	7	6	6	6	6	6	7	5	7	7	7	6	6	6	6	6	6
Customer 17	5	5	6	4	6	5	6	5	6	7	6	6	6	6	6	6	5	6	6	6	6	6
Customer 18	4	4	4	5	6	7	4	6	4	5	4	6	6	4	5	4	4	4	5	6	6	6
Customer 19	4	5	6	6	5	4	5	5	6	3	5	4	2	5	6	3	3	5	5	5	4	5
Customer 20	5	6	6	6	5	6	5	6	6	6	6	6	6	6	6	7	6	6	6	5	6	6
Customer 21	5	4	5	4	7	6	7	7	7	6	6	7	1	6	6	7	7	7	6	7	7	7
Customer 22	6	6	6	4	7	7	4	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 23	4	4	6	4	7	7	6	7	6	4	7	7	7	6	6	7	6	7	7	7	6	6

Customer 24	6	6	6	6	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7
Customer 25	4	4	5	1	1	2	3	2	1	3	3	4	4	4	4	4	4	4	6	5	4	3
Customer 26	6	6	7	7	6	6	7	6	6	6	6	7	7	6	6	6	7	7	7	6	6	7
Customer 27	6	5	6	5	7	6	7	7	6	7	6	6	6	6	7	7	7	6	5	6	6	7
Customer 28	4	5	4	4	1	1	1	1	4	1	1	1	1	1	1	4	1	1	4	2	4	1
Customer 29	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	6	6	5	5	6	5	6
Customer 30	3	4	4	4	5	4	5	5	5	6	6	4	4	4	5	6	6	6	5	4	6	5
Customer 31	3	3	6	4	5	6	4	5	5	5	6	6	6	6	6	6	6	6	3	6	6	6
Customer 32	4	4	5	5	6	6	5	6	6	6	5	5	4	5	5	4	4	4	4	4	4	4
Customer 33	6	7	7	4	6	6	4	6	6	7	6	6	6	6	6	6	6	7	5	6	6	6
Customer 34	6	7	4	6	7	7	4	7	4	7	5	6	4	5	6	3	7	7	7	5	4	6
Customer 35	4	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 36	7	7	7	6	7	6	7	7	6	7	7	7	7	6	7	6	6	6	6	6	6	6
Customer 37	4	4	5	4	7	7	7	7	6	7	6	6	7	5	7	6	6	7	7	7	6	6

Table F5: Personal Details for Customers at Dealership B

DEALERSHIP B					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Bryanston	No		35-44
Customer 2	No	Bryanston	Yes	Corrugated Manufacturing	25-34
Customer 3	No	Randburg	No		>55
Customer 4	No	Strubens Valley	Yes	Retail (Sports)	25-34
Customer 5	No	Fourways	No		45-54
Customer 6	No	Randburg	Yes	IT	25-34
Customer 7	No	Fourways	No		45-54
Customer 8	No	Fourways	No		35-44
Customer 9	No	Bromhof	No		25-34
Customer 10	No	Radiokop	Yes	Financial Services	45-54
Customer 11	No	Bryanston West	No		35-44
Customer 12	No	Fourways	Yes	Supply of office automation	25-34
Customer 13	No	North Riding	Yes	Events and Communication	25-34
Customer 14	No	Craig	No		35-44
Customer 15	No	Bryanston	Yes	Contract Centre	45-54
Customer 16	No	Morningside	No		45-54
Customer 17	No	Bromhof - Randburg	Yes	Hotels	45-54
Customer 18	No	Northgate	No		25-34
Customer 19	No	Randburg	No		>55
Customer 20	No	Ferndale	Yes	Banking	35-44
Customer 21	No	Lonehill	No		>55
Customer 22	No	Bryanston	No		45-54
Customer 23	No	Northcliff	Yes	Audiovisual	>55
Customer 24	No	-	No		>55
Customer 25	No	-	No		>55
Customer 26	No	Edenvale	Yes	Attorney	35-44
Customer 27	No	Boskruin	No		35-44
Customer 28	No	Northriding	Yes	Financial Services	25-34
Customer 29	No	Randburg	No		35-44
Customer 30	No	Northriding	Yes	Attorney	25-34
Customer 31	No	Randburg	Yes	Cellular	25-34
Customer 32	No	Douglasdale	Yes	Advertising	35-44
Customer 33	No	Randburg	Yes	Financial Services	35-44
Customer 34	No	North Riding	Yes	Consulting	35-44
Customer 35	No	Ferndale	No		35-44
Customer 36	No	Pretoria	Yes	Health	35-44
Customer 37	No	Fourways	No		35-44

Customer 38	No	Fourways	Yes	Home Improvement	35-44
Customer 39	No	Randburg	Yes	Marketing and Sales	25-34
Customer 40	No	Randburg	No		25-34
Customer 41	No	Fontainbleu	Yes	Consulting	25-34
Customer 42	No	Honeydew	Yes	IT	25-34
Customer 43	No	Pretoria	No		25-34
Customer 44	No	Randpark	Yes	Electronics Security	>55
Customer 45	No	Olivedale	Yes	Consulting	>55
Customer 46	No	Fourways	No		<25
Customer 47	No	Bedfordview	Yes	Distribution	25-34
Customer 48	No	Northriding	Yes	Event Management and Training	25-34
Customer 49	No	Randburg	No		45-54
Customer 50	No	Roodepoort	No		25-34
Customer 51	No	Randburg	No		25-34
Customer 52	Yes	North Riding	No		25-34
Customer 53	No	Randpark Ridge	Yes	IT	35-44
Customer 54	No	Randburg	Yes	Hospital	35-44
Customer 55	No	North Riding	Yes	Financial Services	25-34
Customer 56	No	Randburg	No		35-44
Customer 57	No	Bergbron	Yes	Internal Auditing	25-34
Customer 58	No	Olivedale	Yes	Advertising	35-44
Customer 59	No	Douglasdale	No		25-34
Customer 60	Yes	Northcliff	No		45-54

Table F6: Expectation Scores for Customers at Dealership B

DEALERSHIP B																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 2	6	6	6	6	7	6	6	6	6	6	6	7	6	6	6	6	6	7	7	7	7	7
Customer 3	7	7	7	6	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	7	7
Customer 6	6	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6	6	7	7	7
Customer 7	6	6	6	6	7	7	7	7	7	7	7	6	6	6	7	7	7	6	7	7	7	7
Customer 8	6	6	6	6	6	7	7	7	7	6	7	7	6	6	6	6	6	5	5	5	7	7
Customer 9	5	5	5	5	5	6	5	5	5	4	5	5	4	5	5	6	4	5	4	5	4	6
Customer 10	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 11	6	7	7	6	6	7	7	6	7	7	7	7	6	7	7	7	7	6	6	6	7	6
Customer 12	7	7	7	6	7	7	7	6	6	6	6	7	7	7	7	7	6	6	5	6	7	7
Customer 13	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 14	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 15	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 17	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Customer 18	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 19	7	7	7	6	7	6	6	6	7	6	6	6	7	7	6	6	6	6	6	6	6	6
Customer 20	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 21	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 22	5	6	7	5	7	7	7	7	7	7	6	7	7	7	7	6	6	6	6	6	6	6

Customer 23	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 24	7	7	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	6	6	6	6	6	6	6	6	5	6	6	6	5	6	6	6	6	6	6	6	6	5
Customer 27	6	6	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	5	6	7	7
Customer 28	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	6	6	7	6	7	7	5	7	7	7	7	7	7	6	6	6	6	7	7	6	6	6
Customer 30	5	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 31	7	7	7	7	7	6	6	7	6	6	6	7	7	7	6	6	7	7	7	7	7	7
Customer 32	7	7	6	7	6	7	6	7	7	7	7	7	5	6	6	6	7	7	7	7	7	7
Customer 33	5	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7
Customer 34	4	4	7	7	7	7	7	7	7	7	7	7	4	7	7	4	7	7	4	7	4	7
Customer 35	5	5	6	6	7	7	6	7	6	5	6	6	5	6	6	7	6	6	5	6	6	6
Customer 36	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 37	6	6	7	7	7	7	7	7	7	6	7	7	7	6	6	7	6	7	6	7	7	7
Customer 38	6	7	5	5	7	7	7	7	6	7	7	7	6	7	7	7	7	5	6	6	7	7
Customer 39	6	6	5	5	7	7	7	7	7	7	6	6	6	7	7	6	7	7	6	7	6	7
Customer 40	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7
Customer 41	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	6	6	6
Customer 42	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7
Customer 43	6	6	5	6	4	4	4	5	6	3	4	5	5	5	6	6	5	4	7	6	7	6
Customer 44	6	6	6	6	7	6	7	7	6	7	6	6	6	6	6	6	6	6	6	6	6	6
Customer 45	6	6	6	6	7	6	6	6	6	6	6	7	7	6	6	6	5	6	5	6	5	6
Customer 46	4	5	7	6	7	6	7	5	7	7	7	7	7	7	6	6	7	5	4	5	5	4
Customer 47	6	6	6	7	6	7	6	6	5	4	6	6	5	6	6	6	5	7	6	6	5	5
Customer 48	7	7	7	7	7	7	7	7	7	7	7	7	4	5	7	7	6	6	5	5	6	6
Customer 49	5	6	7	7	7	7	7	7	7	6	7	7	7	6	7	6	6	6	6	6	6	6
Customer 50	7	7	7	7	7	7	7	7	7	6	7	7	6	6	6	7	7	7	6	6	7	7

Customer 51	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 52	6	6	7	7	7	7	7	7	7	6	6	7	6	7	7	6	6	5	5	6	5	7
Customer 53	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	7	7	7
Customer 55	6	6	7	7	7	7	7	7	7	6	7	7	6	7	7	7	7	7	6	6	6	7
Customer 56	2	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 57	6	6	7	4	7	7	6	7	6	6	6	7	7	2	7	4	7	7	5	7	7	6
Customer 58	5	5	6	6	6	6	5	5	5	5	6	6	5	5	5	6	6	5	6	5	6	6
Customer 59	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 60	7	5	5	5	6	7	6	7	6	6	7	7	7	6	7	5	6	7	6	6	7	6

Table F7: Importance Weighting Scores for Customers at Dealership B

DEALERSHIP B					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	50	20	10	10
Customer 2	15	25	20	15	25
Customer 3	10	50	20	10	10
Customer 4	10	15	50	10	15
Customer 5	20	30	20	20	10
Customer 6	10	25	25	25	15
Customer 7	3	80	10	4	3
Customer 8	10	50	10	20	10
Customer 9	10	50	10	10	20
Customer 10	5	50	10	30	5
Customer 11	10	40	20	20	10
Customer 12	5	40	10	40	5
Customer 13	15	25	20	20	20
Customer 14	20	60	10	10	0
Customer 15	20	20	20	20	20
Customer 16	10	22.5	22.5	22.5	22.5
Customer 17	10	30	20	20	20
Customer 18	0	60	30	5	5
Customer 19	10	30	30	15	15
Customer 20	10	60	10	10	10
Customer 21	25	25	15	25	10
Customer 22	20	40	20	10	10
Customer 23	20	20	20	20	20
Customer 24	22	18	20	22	18
Customer 25	5	75	10	5	5
Customer 26	10	10	20	50	10
Customer 27	40	30	10	10	10
Customer 28	10	60	10	10	10
Customer 29	10	40	15	20	15
Customer 30	25	30	10	5	30
Customer 31	20	20	20	20	20
Customer 32	10	40	20	10	20
Customer 33	10	50	15	15	10
Customer 34	10	40	20	20	10
Customer 35	10	50	15	15	10
Customer 36	20	20	20	20	20
Customer 37	10	20	40	20	10

Customer 38	10	25	20	25	20
Customer 39	20	30	10	30	10
Customer 40	25	25	15	15	20
Customer 41	10	40	20	15	15
Customer 42	25	25	20	25	5
Customer 43	30	20	30	10	10
Customer 44	30	10	20	20	20
Customer 45	30	30	10	20	10
Customer 46	19	41	10	10	20
Customer 47	20	15	15	15	35
Customer 48	25	25	25	25	0
Customer 49	10	25	30	20	15
Customer 50	10	60	10	10	10
Customer 51	45	40	5	5	5
Customer 52	5	50	30	10	5
Customer 53	10	15	30	30	15
Customer 54	0	20	30	30	20
Customer 55	20	20	20	20	20
Customer 56	10	50	10	20	10
Customer 57	10	50	10	10	20
Customer 58	15	50	15	10	10
Customer 59	6	60	20	10	4
Customer 60	15	50	15	10	10

Table F8: Perception Scores for Customers at Dealership B

DEALERSHIP B																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	5	4	4	3	4	4	4	4	5	6	6	4	5	5	5	5	5	5	6	6	5	5
Customer 2	6	6	6	6	7	7	7	7	7	7	6	6	6	6	6	6	6	7	7	7	7	7
Customer 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	7	7	7	7	5	5	5	6	7	5	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	7	6	7	7	5	4	3	3	2	6	5	5	6	2	5	7	2	5	6	6	5	4
Customer 6	5	6	6	4	5	5	6	6	5	4	6	6	5	5	5	6	5	4	6	6	6	5
Customer 7	6	6	6	6	5	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	5	5
Customer 8	5	5	7	5	6	6	6	6	6	6	6	6	5	6	6	7	6	6	6	6	6	6
Customer 9	6	6	6	6	6	5	3	6	6	6	6	6	5	6	6	7	5	6	4	6	5	6
Customer 10	7	7	7	7	6	7	7	6	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Customer 11	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	7	6	6	7	6	6	6
Customer 12	7	7	6	4	7	5	6	6	6	7	7	7	6	7	6	6	5	6	7	7	5	4
Customer 13	6	6	6	5	3	3	3	5	4	7	6	6	5	5	4	7	5	5	6	6	5	5
Customer 14	6	5	6	6	4	5	4	4	5	6	5	7	7	6	7	7	6	6	7	7	6	6
Customer 15	6	6	4	5	1	1	1	1	2	2	2	2	1	1	2	2	1	1	4	2	1	1
Customer 16	4	7	7	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 17	7	7	7	6	7	6	6	7	7	7	7	7	5	7	6	7	7	7	7	7	6	6
Customer 18	6	6	7	7	5	6	5	5	5	6	6	6	7	6	7	7	7	6	6	6	7	6
Customer 19	6	6	7	6	7	7	6	6	6	7	7	6	6	7	6	6	6	7	7	6	6	7
Customer 20	5	6	7	5	6	5	4	4	4	5	6	6	5	6	5	6	5	5	3	6	6	5
Customer 21	5	5	5	5	2	2	1	2	3	3	3	4	4	4	4	4	3	4	5	4	4	4
Customer 22	5	4	4	5	6	6	6	5	6	4	5	5	5	4	4	5	4	5	5	5	5	5

Customer 23	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 24	4	6	6	5	4	5	5	5	4	5	6	6	5	5	4	5	4	5	5	6	3	4
Customer 25	7	7	7	6	7	7	6	7	6	7	7	7	7	6	7	7	7	7	5	7	6	7
Customer 26	6	6	6	4	5	6	5	5	6	6	6	6	6	6	6	6	5	6	6	6	5	5
Customer 27	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7	7	7	4	7	7	7
Customer 28	6	7	7	7	7	6	7	7	6	7	6	6	6	6	6	6	6	6	6	6	6	6
Customer 29	5	5	7	4	6	6	6	7	6	6	7	7	6	6	6	7	6	7	6	7	6	7
Customer 30	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 31	6	6	7	6	6	6	7	7	6	6	6	6	6	6	6	7	7	7	6	7	7	7
Customer 32	7	7	5	7	5	6	6	7	5	7	6	7	5	7	7	7	7	7	7	7	7	7
Customer 33	6	6	7	7	6	6	6	6	6	6	5	5	3	5	3	6	6	6	7	5	5	5
Customer 34	3	4	4	4	2	2	1	1	4	4	4	4	4	2	4	3	4	4	6	4	3	4
Customer 35	6	6	7	6	6	6	6	6	7	6	6	7	2	5	6	6	4	2	6	4	6	6
Customer 36	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 37	5	5	5	3	5	4	6	5	5	6	3	5	4	6	6	6	6	6	5	5	6	6
Customer 38	5	5	5	4	6	5	6	7	6	7	5	6	7	7	7	7	7	6	7	6	7	6
Customer 39	6	7	7	7	5	5	1	5	3	6	4	4	4	1	1	5	4	5	6	6	6	5
Customer 40	6	6	5	4	6	5	5	5	3	2	4	5	5	5	5	6	6	5	6	6	5	6
Customer 41	7	7	7	7	1	2	1	1	4	4	4	2	2	2	4	2	2	4	4	2	2	2
Customer 42	6	7	7	7	7	7	6	7	7	7	6	6	6	6	6	7	7	6	6	6	6	6
Customer 43	6	6	7	6	6	6	5	6	5	3	5	5	6	6	5	7	6	6	7	6	6	5
Customer 44	6	6	5	6	5	4	4	5	5	6	5	5	4	5	5	6	4	4	6	6	5	5
Customer 45	7	7	6	6	7	6	6	7	6	7	7	7	7	7	6	7	7	7	6	7	6	7
Customer 46	6	5	7	7	7	7	5	5	5	5	6	7	5	4	4	7	1	4	2	3	3	4
Customer 47	5	6	6	6	5	6	6	6	5	5	6	7	6	7	6	6	6	7	6	7	7	6
Customer 48	5	5	5	6	7	6	6	6	4	5	6	6	5	6	6	6	4	6	6	5	6	5
Customer 49	5	5	6	6	6	6	2	4	4	5	4	6	4	6	6	5	5	6	4	7	5	5

Customer 50	5	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	7	6	7	7	7	7
Customer 51	6	6	6	6	4	3	3	3	3	4	4	4	4	3	4	4	4	4	4	4	4	4
Customer 52	6	6	7	6	7	7	7	7	7	7	7	7	7	6	6	7	7	6	5	6	6	6
Customer 53	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	5	5	6	6	5	5	2	5	2	5	3	3	5	3	5	5	5	3	5	5	4	4
Customer 55	4	7	7	7	7	7	7	7	6	7	7	6	7	7	7	7	6	7	6	6	6	7
Customer 56	7	7	7	6	7	4	1	7	1	4	7	1	4	4	3	4	7	7	7	7	3	7
Customer 57	5	6	6	3	5	6	5	6	6	3	5	5	3	6	6	6	6	6	6	5	6	6
Customer 58	4	5	5	5	2	2	3	4	4	3	4	4	2	2	3	4	2	2	2	2	3	3
Customer 59	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6	5	4	6	5	5
Customer 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F9: Personal Details for Customers at Dealership D

DEALERSHIP D					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Randburg	Yes	Banking	45-54
Customer 2	No	Johannesburg	Yes	Professional Services	25-34
Customer 3	No	Pretoria West	Yes	Cellular Industry	25-34
Customer 4	No	Riverclub	Yes	Airline Industry	35-44
Customer 5	No	Paulshof	Yes	Church	35-44
Customer 6	No	Parkview	Yes	Doctor	>55
Customer 7	No	Marlboro	No		<25
Customer 8	No	Sunninghill	No		25-34
Customer 9	No	Highlands North Ext.	Yes	Motorcycles	45-54
Customer 10	No	Fourways	Yes	Publishing - Advertising	35-44
Customer 11	No	Morningside	No		25-34
Customer 12	Yes	Lonehill	No		35-44
Customer 13	No	Saxonwold	No		45-54
Customer 14	No	Hurlingham	No		35-44
Customer 15	No	Bosmont	No		35-44
Customer 16	No	Bez Valley	Yes	Architect	45-54
Customer 17	No	Erasmia, Pretoria	Yes	Medical Aid	25-34
Customer 18	No	Bryanston	No		35-44
Customer 19	No	Kameelfontein, Pretoria	No		35-44
Customer 20	No	Fourways	No		45-54
Customer 21	No	Sunninghill	No		25-34
Customer 22	No	Alberton	Yes	Manufacturing	35-44
Customer 23	No	Midrand	Yes	Banking	25-34
Customer 24	No	Brakpan	Yes	Car licensing	>55
Customer 25	No	Pretoria	No		25-34
Customer 26	No	Ennerdale	No		>55
Customer 27	No	Krugersdorp	No		<25
Customer 28	No	Weltevredenpark	No		35-44
Customer 29	Yes	Glenanda North	Yes	Financial	25-34
Customer 30	Yes	Equestria, Pretoria	No		25-34
Customer 31	Yes	Lynnwood Glen	No		<25
Customer 32	Yes	Randburg	Yes	Retail Sales Consultant	25-34
Customer 33	Yes	Randpark Ridge	Yes	Music Buyer	25-34

Table F10: Expectation Scores for Customers at Dealership D

DEALERSHIP D																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	6	6	6	6	6	6	6	6	6	5	6	6	6	6	6	7	7	5	5	6	6	6
Customer 2	5	6	7	5	7	7	6	7	6	5	5	6	5	7	5	5	6	5	6	5	6	5
Customer 3	6	5	6	5	6	6	6	6	6	7	5	5	6	7	6	7	5	6	7	7	7	6
Customer 4	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	7	6
Customer 5	6	6	6	6	6	7	7	7	6	6	6	7	5	6	6	6	6	6	6	5	7	6
Customer 6	7	7	7	5	7	7	7	7	6	7	7	7	5	7	7	7	6	7	5	7	7	7
Customer 7	4	5	7	4	4	7	7	4	6	7	7	7	7	6	7	6	6	7	7	7	7	6
Customer 8	7	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	7	6
Customer 9	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 10	5	6	6	6	7	7	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6
Customer 11	5	6	6	6	7	6	7	7	6	7	7	7	6	7	7	7	7	7	7	7	6	6
Customer 12	5	5	5	5	5	6	6	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 13	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 14	6	6	6	3	4	5	5	5	4	5	5	6	6	6	5	5	4	5	5	5	5	5
Customer 15	7	6	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6	6	6	7	7
Customer 16	6	6	6	6	7	7	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7	7
Customer 17	7	7	7	7	7	7	6	6	7	7	7	7	6	7	7	7	7	6	6	6	7	5
Customer 18	4	4	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	5	6	6	6	6	6	6	6	6	6	6	7	7	7	6	5	6	6	6	6	7	6
Customer 20	5	5	6	4	7	7	7	7	7	5	5	6	6	7	5	5	6	7	5	5	5	6
Customer 21	1	4	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	5	7	7
Customer 22	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Customer 23	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 24	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	7	6	6	6	7	7	6	6	7	7	7	7	7	7	7	7	6	6	7	7	7	
Customer 26	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 27	5	6	7	7	7	7	7	7	7	7	6	6	7	7	7	7	6	7	7	7	7	
Customer 28	4	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 29	5	5	6	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Customer 30	3	4	5	6	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	
Customer 31	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 32	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	7	
Customer 33	6	7	7	7	6	7	5	6	6	7	7	7	6	7	7	7	7	5	5	5	6	6

Table F11: Importance Weighting Scores for Customers at Dealership D

DEALERSHIP D					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	50	10	20	10
Customer 2	5	30	20	30	15
Customer 3	15	15	15	20	35
Customer 4	20	20	20	20	20
Customer 5	10	30	30	15	15
Customer 6	10	30	30	20	10
Customer 7	50	5	10	20	15
Customer 8	10	50	10	20	10
Customer 9	10	50	20	10	10
Customer 10	5	60	20	10	5
Customer 11	20	35	15	15	15
Customer 12	25	25	15	10	25
Customer 13	10	40	20	15	15
Customer 14	20	30	25	15	10
Customer 15	4	70	10	6	10
Customer 16	15	40	15	20	10
Customer 17	5	40	20	30	5
Customer 18	10	60	10	10	10
Customer 19	5	50	20	15	10
Customer 20	10	40	20	15	15
Customer 21	5	45	20	20	10
Customer 22	10	20	50	10	10
Customer 23	10	30	30	10	20
Customer 24	20	20	20	20	20
Customer 25	10	40	20	10	20
Customer 26	20	20	30	15	15
Customer 27	15	30	25	20	10
Customer 28	20	20	20	20	20
Customer 29	10	50	20	10	10
Customer 30	10	50	20	10	10
Customer 31	20	30	20	15	15
Customer 32	10	30	15	30	15
Customer 33	20	40	20	10	10

Table F12: Perception Scores for Customers at Dealership D

DEALERSHIP D																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	5	5	5	5	6	6	5	6	6	6	6	6	7	7	6	6	6	7	7	7	7	6
Customer 2	6	5	7	5	5	6	7	6	4	6	7	7	7	7	5	6	5	5	7	6	5	5
Customer 3	7	4	6	4	5	6	7	6	4	6	6	7	5	7	6	7	6	7	5	6	7	6
Customer 4	5	5	6	5	6	6	5	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6
Customer 5	6	5	6	5	6	6	7	6	6	6	7	7	6	6	7	6	7	7	7	6	6	6
Customer 6	6	6	6	5	4	4	1	6	5	6	5	6	5	5	6	5	5	5	4	6	5	5
Customer 7	6	7	7	4	4	7	7	4	5	7	5	7	7	7	7	7	7	7	7	7	7	7
Customer 8	6	6	7	7	7	7	3	7	7	6	7	7	7	6	6	7	7	7	6	6	5	6
Customer 9	6	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 10	5	5	6	5	7	6	6	7	6	7	7	7	7	7	7	6	6	6	6	6	6	6
Customer 11	6	6	7	6	7	7	6	7	6	7	7	6	6	7	6	7	7	7	5	6	6	6
Customer 12	3	4	3	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4
Customer 13	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 14	3	3	5	3	5	5	5	5	5	5	6	7	7	6	6	6	6	6	6	6	6	6
Customer 15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	6	6	6	5	6	7	6	6	6	7	6	7	6	6	6	6	6	6	6	6	6	6
Customer 17	6	6	6	6	6	6	6	6	6	7	7	7	7	6	6	6	6	6	6	6	4	3
Customer 18	5	5	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	5	6	6	5	6	6	6	5	5	6	6	6	6	5	5	6	5	5	6	6	5	5
Customer 20	5	6	6	4	7	7	6	7	6	5	7	7	6	6	5	7	6	7	7	6	6	6
Customer 21	4	2	1	4	1	1	1	1	4	1	1	1	1	1	4	1	2	1	4	7	4	2
Customer 22	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Customer 23	4	5	6	6	4	4	3	3	3	4	4	5	4	5	5	5	5	5	3	4	4	4
Customer 24	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	5	5	5	4	5	4	5	6	5	6	5	7	6	5	6	7	5	4	6	5	6	4
Customer 26	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 27	5	4	4	5	5	6	4	6	4	6	5	6	5	5	5	6	6	5	6	5	5	6
Customer 28	7	4	7	7	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F13: Personal Details for Customers at Dealership E

DEALERSHIP E					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Pretoria	No		>55
Customer 2	No	Linden	Yes	Restaurant	<25
Customer 3	No	Westdene	Yes	IT	45-54
Customer 4	No	Randburg	No		35-44
Customer 5	No	Mulbarton	No		45-54
Customer 6	No	Meyerton	No		>55
Customer 7	No	Kempton Park	Yes	Financial Recruitment	35-44
Customer 8	No	Randburg	Yes	Banking	45-54
Customer 9	No	Bedfordview	Yes	International Trade	35-44
Customer 10	Yes	Benoni	Yes	Offshore Investment Customer Service	25-34
Customer 11	No	Boksburg	No		25-34
Customer 12	No	Benoni	Yes	Attorney	>55
Customer 13	No	Observatory	No		>55
Customer 14	No	Pretoria	No		35-44
Customer 15	No	Bedford Gardens	Yes	Eskom	25-34
Customer 16	No	Bruma	No		45-54
Customer 17	No	Meyerton Vaalsand	No		35-44
Customer 18	No	Boksburg	No		25-34
Customer 19	No	Bez-Valley	Yes	Customs	<25
Customer 20	Yes	Alberton	No		35-44
Customer 21	Yes	Heidelberg	No		25-34

Table F14: Expectation Scores for Customers at Dealership E

DEALERSHIP E																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	7	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 2	6	6	7	6	7	7	7	5	7	6	6	7	5	7	7	6	7	6	5	6	7	6
Customer 3	6	6	6	5	6	6	6	6	6	6	6	7	7	7	5	6	6	6	6	6	6	6
Customer 4	6	5	5	4	5	7	4	6	6	5	6	6	5	7	5	5	6	6	5	6	6	5
Customer 5	5	5	7	4	7	7	6	6	6	5	5	5	5	5	5	5	5	7	7	7	7	6
Customer 6	6	5	6	6	7	7	7	6	7	7	7	7	6	6	6	7	6	6	7	6	7	7
Customer 7	5	5	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 8	4	6	7	6	7	7	7	7	6	7	7	7	6	6	7	7	7	7	7	7	5	6
Customer 9	5	6	7	6	5	7	5	6	6	7	7	7	7	7	7	7	5	7	7	6	7	7
Customer 10	7	7	6	6	7	7	7	6	7	6	7	7	6	7	7	7	6	6	7	6	7	6
Customer 11	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	7	7	7	7	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7
Customer 13	7	7	7	7	7	7	7	7	7	5	7	7	6	7	7	7	6	6	6	7	7	6
Customer 14	5	7	7	7	7	7	6	7	7	7	7	7	5	7	7	7	6	7	5	6	7	6
Customer 15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	7	7	6	7	7	7	7	7	7	6	7	7	6	7	7	7	7	6	5	7	7	7
Customer 17	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 18	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	6
Customer 21	6	6	6	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Table F15: Importance Weighting Scores for Customers at Dealership E

DEALERSHIP E					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	70	5	10	5
Customer 2	25	20	25	15	15
Customer 3	5	70	10	5	10
Customer 4	15	30	20	15	20
Customer 5	10	30	30	20	10
Customer 6	15	20	20	20	25
Customer 7	5	60	15	15	5
Customer 8	10	50	15	10	15
Customer 9	10	40	30	10	10
Customer 10	27.5	15	27.5	15	15
Customer 11	10	60	10	10	10
Customer 12	10	30	30	20	10
Customer 13	10	40	20	15	15
Customer 14	20	20	25	15	20
Customer 15	10	30	20	20	20
Customer 16	20	40	20	10	10
Customer 17	10	50	20	10	10
Customer 18	20	20	20	20	20
Customer 19	50	20	20	5	5
Customer 20	10	40	20	10	20
Customer 21	20	30	15	20	15

Table F16: Perception Scores for Customers at Dealership E

DEALERSHIP E																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	7	6	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7
Customer 2	5	6	6	7	7	7	6	6	6	6	7	7	7	6	6	7	5	7	7	7	7	5
Customer 3	5	4	4	4	6	7	6	7	6	5	4	6	5	6	5	7	5	5	7	7	6	6
Customer 4	5	5	5	4	6	7	6	6	5	7	6	6	5	6	5	6	6	6	4	6	7	6
Customer 5	6	5	7	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 6	5	6	6	5	6	5	6	6	6	6	6	6	6	5	6	7	7	6	6	6	7	5
Customer 7	5	5	7	6	7	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	6	7
Customer 8	6	6	5	6	6	6	6	6	5	6	6	7	6	6	6	6	6	7	6	6	6	6
Customer 9	6	5	7	6	5	7	4	5	7	6	6	7	7	7	7	7	7	6	6	6	7	7
Customer 10	6	4	6	6	6	6	6	7	6	6	6	6	6	6	6	6	6	6	4	6	6	6
Customer 11	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	7	7	7	7	7	7	6	7	7	4	7	7	7	7	7	7	7	7	4	7	7	7
Customer 13	6	6	6	5	6	7	7	6	5	4	5	6	6	6	7	7	6	6	7	6	6	5
Customer 14	5	4	5	5	5	6	6	6	5	6	6	6	5	5	6	6	6	6	5	6	6	6
Customer 15	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	6	7	6	7	7	7	6	7	6	7	6	7	7	7	7	7	6	7	6	7	7	7
Customer 17	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 18	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F17: Personal Details for Customers at Dealership F

DEALERSHIP F					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Bez-valley	No		35-44
Customer 2	No	Bedfordview	Yes	Test Equipment Specialist	25-34
Customer 3	No	Kempton Park	No		35-44
Customer 4	No	Pretoria	Yes	Insurance	35-44
Customer 5	No	Kempton Park	Yes	Insurance Broker	>55
Customer 6	No	Greenstone	Yes	Sales manager	35-44
Customer 7	No	Kensington	No		25-34
Customer 8	Yes	Northriding	Yes	Candidate Attorney	<25
Customer 9	Yes	Edenvale	No		<25
Customer 10	Yes	Bedfordview	Yes	Medical Aid	<25
Customer 11	No	Oakdene	No		<25
Customer 12	No	Vanderbijlpark	No		35-44
Customer 13	No	Witfield	No		35-44
Customer 14	No	Bedford Gardens	No		>55
Customer 15	Yes	Walkerville	Yes	Packaging and printing	45-54
Customer 16	Yes	Randpark Ridge	Yes	Teacher	25-34
Customer 17	Yes	Alberton	No		25-34
Customer 18	Yes	Randburg	No		<25
Customer 19	Yes	Cyrildene	Yes	Consulting	25-34

Table F18: Expectation Scores for Customers at Dealership F

DEALERSHIP F																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	6	6	7	4	4	6	7	7	7	6	6	7	6	7	7	7	7	7	7	7	7	
Customer 2	6	6	6	5	6	7	7	7	6	6	6	6	5	6	6	6	6	6	5	6	6	6
Customer 3	5	5	5	6	5	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6
Customer 4	7	6	7	4	7	6	5	7	6	6	7	7	7	6	6	6	5	5	4	5	6	6
Customer 5	6	5	7	7	7	6	7	7	6	7	6	6	6	7	6	7	7	7	7	6	6	6
Customer 6	5	5	7	6	5	7	6	5	5	6	6	6	4	6	7	7	6	7	6	5	7	7
Customer 7	5	5	5	5	7	7	7	7	6	6	7	7	7	6	6	7	7	6	6	6	6	7
Customer 8	7	7	6	7	7	7	7	7	7	7	7	7	6	6	6	7	7	7	7	6	7	7
Customer 9	5	6	7	6	7	7	7	7	7	5	7	7	7	7	7	5	7	5	4	5	6	7
Customer 10	5	4	7	7	4	6	7	7	5	6	5	5	6	5	6	7	7	7	7	7	7	6
Customer 11	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	6	6	6	5	6	6	7	7	7	7	7	7	7	6	6	7	7	6	7	7	7	6
Customer 13	6	6	6	7	6	5	6	5	7	7	7	7	6	7	6	5	3	6	6	6	6	6
Customer 14	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	5
Customer 15	5	5	5	4	7	7	7	7	7	4	7	7	7	6	6	7	7	7	4	6	7	7
Customer 16	6	6	6	4	6	6	6	6	5	6	6	6	4	6	6	6	6	6	6	5	6	6
Customer 17	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 18	6	6	6	7	5	6	6	6	6	7	7	6	5	5	5	6	6	6	6	5	5	6
Customer 19	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Table F19: Importance Weighting Scores for Customers at Dealership F

DEALERSHIP F					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	0	70	30	0	0
Customer 2	10	30	10	40	10
Customer 3	40	15	15	15	15
Customer 4	10	60	20	5	5
Customer 5	10	20	10	40	20
Customer 6	10	20	10	10	50
Customer 7	10	30	20	20	20
Customer 8	10	50	20	10	10
Customer 9	25	25	25	15	10
Customer 10	20	50	10	10	10
Customer 11	10	30	30	15	15
Customer 12	5	40	30	20	5
Customer 13	10	50	20	10	10
Customer 14	5	70	5	10	10
Customer 15	20	20	20	20	20
Customer 16	25	40	10	20	5
Customer 17	20	30	20	20	10
Customer 18	21	18	21	19	21
Customer 19	50	20	10	10	10

Table F20: Perception Scores for Customers at Dealership F

DEALERSHIP F																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	7	6	7	5	7	7	7	7	6	7	7	7	7	7	7	7	6	7	6	7	7	6
Customer 2	5	5	6	5	6	5	5	6	5	6	6	6	6	5	5	5	4	5	6	6	5	6
Customer 3	4	4	6	6	6	5	6	6	6	6	6	6	5	5	6	6	6	6	6	6	6	6
Customer 4	5	6	6	5	5	6	7	6	5	7	6	7	7	6	5	5	4	5	5	6	6	6
Customer 5	7	7	7	6	7	6	7	7	6	7	7	7	6	7	7	7	6	7	7	7	7	7
Customer 6	5	5	6	3	5	6	6	6	5	5	6	6	6	5	5	6	6	6	5	5	6	6
Customer 7	5	5	6	6	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5
Customer 8	7	7	7	7	6	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 9	7	7	5	4	6	7	7	6	4	5	5	4	3	6	3	3	6	7	4	7	5	4
Customer 10	7	5	7	7	7	6	7	7	7	6	6	7	7	6	7	7	7	6	7	6	7	7
Customer 11	1	1	4	5	1	3	1	3	1	1	1	1	3	3	3	3	1	1	1	1	1	1
Customer 12	6	6	6	5	1	2	1	3	2	2	5	5	4	4	4	6	4	6	6	6	4	5
Customer 13	7	7	7	7	6	5	5	5	6	6	6	6	6	5	6	7	5	7	5	6	6	6
Customer 14	7	7	5	6	5	5	5	5	5	6	6	6	5	5	5	6	5	5	6	5	5	5
Customer 15	5	6	7	7	4	7	7	7	7	6	7	6	7	7	6	7	5	6	6	7	7	6
Customer 16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F21: Personal Details for Customers at Dealership G

DEALERSHIP G					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Naturena	No		25-34
Customer 2	Yes	Kensington	No		>55
Customer 3	No	Gertview	Yes	IT	25-34
Customer 4	No	Observatory Ext.	No		>55
Customer 5	No	Mountainview	No		25-34
Customer 6	No	Pretoria	Yes	Finance	25-34
Customer 7	No	Benoni	No		45-54
Customer 8	No	Norwood	No		35-44
Customer 9	No	Edenvale	Yes	Catering	35-44
Customer 10	No	Orange Grove	No		25-34
Customer 11	No	Boksburg	No		35-44
Customer 12	No	Sydenham	Yes	Building	45-54
Customer 13	No	Pretoria	No		25-34
Customer 14	No	Kempton Park	Yes	Government	35-44
Customer 15	No	Bedfordview	Yes	IT	35-44
Customer 16	No	The Hill	Yes	Corporate Training	35-44
Customer 17	No	Lenasia	Yes	Network Support	45-54
Customer 18	No	Houghton	No		25-34
Customer 19	No	Edenvale	No		25-34
Customer 20	No	Boksburg	No		>55
Customer 21	No	Germiston	Yes	Sales	25-34
Customer 22	No	Benoni	No		25-34
Customer 23	No	Johannesburg	Yes	IT	35-44
Customer 24	No	Brakpan	No		35-44
Customer 25	No	Houghton	Yes	Events Management	<25
Customer 26	No	Johannesburg Central	No		45-54
Customer 27	No	Illovo	No		25-34
Customer 28	No	Troyeville	No		>55
Customer 29	No	Sydenham	No		35-44
Customer 30	No	Boksburg	No		<25
Customer 31	No	Benoni	Yes	Japanese Gardens	35-44
Customer 32	No	Edenvale	No		35-44
Customer 33	No	Lenasia	Yes	Banking	25-34
Customer 34	No	Braamfontein	No		25-34
Customer 35	Yes	Midrand	Yes	Automotive Aftermarket Parts	25-34
Customer 36	Yes	Observatory	Yes	Guest House	>55
Customer 37	Yes	Germiston	No		25-34
Customer 38	Yes	Kensington	No		45-54
Customer 39	Yes	Midrand	No		25-34

Table F22: Expectation Scores for Customers at Dealership G

DEALERSHIP G																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	5	3	6	5	5	6	1	5	2	6	5	5	4	6	5	6	6	6	6	6	5	4
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 3	4	4	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	7	6	7	6	7	7	6	7	7	7	6	7	6	7	7	7	7	7	7	7	7	6
Customer 5	4	7	7	4	4	4	4	4	4	4	4	7	7	4	7	6	7	5	7	5	4	6
Customer 6	6	6	6	6	7	6	6	7	6	7	6	6	7	6	7	6	6	7	6	6	6	6
Customer 7	6	7	7	7	6	7	7	7	7	5	5	7	7	7	5	4	7	7	7	7	7	7
Customer 8	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	6	7	7	7	7	7	6
Customer 9	7	7	7	7	6	7	7	6	6	6	6	7	6	7	7	6	6	7	4	6	6	6
Customer 10	6	6	6	6	5	6	6	6	6	6	6	6	4	6	6	6	5	6	7	6	6	7
Customer 11	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	6	6	6	3	3	6	4	4	4	6	6	6	6	5	5	6	6	6	5	6	6	6
Customer 13	6	7	7	6	7	7	7	7	6	7	6	7	7	7	7	7	6	7	5	7	7	7
Customer 14	6	6	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	6	6	6
Customer 15	6	6	7	6	7	7	7	7	7	6	7	7	7	6	7	7	7	6	5	6	7	7
Customer 16	5	7	7	6	7	7	7	7	7	5	7	7	6	7	7	7	7	7	6	7	7	7
Customer 17	7	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7
Customer 18	7	4	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	7	6	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	7	6	6	6	7	7	6	7	7	6	7	7	6	7	6	7	7	6	7	7	7	7
Customer 21	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 22	5	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Customer 23	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7
Customer 24	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	2	6	7	5	7	7	6	6	5	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 26	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	7	7	7
Customer 27	6	6	7	6	7	6	7	6	7	6	6	6	5	7	6	6	7	7	5	6	7	7
Customer 28	5	7	7	7	5	7	7	5	5	7	7	7	5	7	7	7	7	7	7	7	7	7
Customer 29	6	7	7	6	7	7	7	6	7	6	7	7	7	7	7	7	7	6	6	7	7	6
Customer 30	5	6	6	7	7	7	7	7	7	5	7	7	6	7	7	7	7	6	7	7	7	7
Customer 31	6	6	5	5	7	7	7	7	7	7	7	7	6	7	7	7	7	6	6	6	7	6
Customer 32	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 33	6	6	7	5	7	7	7	7	6	6	7	7	7	7	7	6	7	7	6	7	7	7
Customer 34	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	7	6	5	6	7	6
Customer 35	4	4	5	5	6	7	6	7	7	6	6	6	6	7	7	6	6	6	6	6	7	6
Customer 36	5	4	5	5	7	7	7	7	7	6	7	7	7	7	7	7	7	7	5	7	7	7
Customer 37	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 38	6	6	7	5	5	7	6	6	7	6	7	7	6	7	7	7	5	6	7	6	7	6
Customer 39	6	6	5	6	5	5	5	5	4	4	4	4	5	4	5	5	5	5	5	5	5	6

Table F23: Importance Weighting Scores for Customers at Dealership G

DEALERSHIP G					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	15	10	30	20	25
Customer 2	20	20	20	20	20
Customer 3	10	30	20	20	20
Customer 4	10	60	10	10	10
Customer 5	10	40	10	20	20
Customer 6	20	20	20	20	20
Customer 7	20	20	10	20	30
Customer 8	5	80	5	5	5
Customer 9	10	40	20	20	10
Customer 10	10	30	10	30	20
Customer 11	10	40	5	40	5
Customer 12	10	20	25	20	25
Customer 13	10	60	10	10	10
Customer 14	20	20	20	20	20
Customer 15	5	50	20	10	15
Customer 16	5	60	20	10	5
Customer 17	5	60	20	10	5
Customer 18	20	20	20	20	20
Customer 19	20	20	20	20	20
Customer 20	10	60	10	10	10
Customer 21	2.5	80	10	2.5	5
Customer 22	5	75	10	5	5
Customer 23	15	50	10	15	10
Customer 24	5	50	20	10	15
Customer 25	5	5	20	20	50
Customer 26	20	20	20	20	20
Customer 27	15	40	15	20	10
Customer 28	5	45	45	2.5	2.5
Customer 29	20	15	15	30	20
Customer 30	5	25	30	20	20
Customer 31	10	60	10	10	10
Customer 32	5	50	15	15	15
Customer 33	10	30	20	20	20
Customer 34	5	15	20	45	15
Customer 35	5	60	20	10	5
Customer 36	5	50	10	25	10
Customer 37	20	30	20	10	20
Customer 38	10	30	30	20	10
Customer 39	5	40	5	20	30

Table F24: Perception Scores for Customers at Dealership G

DEALERSHIP G																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	2	3	4	6	5	5	6	5	1	4	4	6	5	5	4	6	5	5	2	5	5	5
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	6	6	6	6	7	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7
Customer 5	4	6	7	5	6	7	6	6	7	7	7	7	7	7	6	7	7	7	7	7	6	6
Customer 6	6	5	6	4	6	6	4	5	4	6	6	6	5	5	5	6	6	6	6	6	6	6
Customer 7	4	4	7	7	4	5	7	6	6	5	6	5	4	4	6	6	7	7	1	5	4	5
Customer 8	7	7	7	5	6	7	6	7	5	5	7	7	6	7	7	6	7	6	7	7	7	6
Customer 9	7	7	7	5	5	5	4	5	5	7	6	7	6	5	6	7	5	7	4	7	6	6
Customer 10	7	6	7	5	6	7	5	6	7	7	6	7	5	6	7	7	6	7	5	7	7	6
Customer 11	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	6	6	5	4	3	5	3	5	4	5	5	6	6	5	4	6	6	5	6	5	5	5
Customer 13	7	7	6	6	6	6	7	6	7	7	7	7	7	7	7	6	6	7	5	7	7	7
Customer 14	6	6	6	6	6	6	5	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 15	5	5	6	5	6	6	6	6	5	7	6	6	5	6	6	6	6	5	5	5	5	6
Customer 16	6	6	6	5	6	5	6	6	5	4	5	6	6	5	6	6	4	6	6	6	5	6
Customer 17	5	5	6	5	6	6	4	6	5	7	7	7	6	6	6	7	6	6	7	7	6	6
Customer 18	6	6	7	7	6	6	6	6	4	7	7	7	6	6	6	7	6	6	6	7	6	6
Customer 19	6	6	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	6	6	7	7	7	7	6	7	7	5	7	6	6	7	7	7	7	6	7	7	6	7
Customer 21	5	6	7	6	3	3	2	4	4	5	6	6	5	4	4	6	5	5	7	5	3	2
Customer 22	6	6	6	6	5	6	5	5	6	6	6	6	7	6	5	7	6	6	6	6	6	6

Customer 23	6	6	6	6	5	6	4	4	6	6	5	5	5	5	6	6	5	5	5	5	5	6
Customer 24	4	5	6	6	2	6	1	3	1	6	4	6	2	3	3	6	2	6	6	6	6	1
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
Customer 26	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 27	6	7	6	6	6	6	6	7	6	7	7	6	6	6	6	6	6	6	7	6	5	5
Customer 28	7	7	7	7	5	7	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	6	7	6	5	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	6	5	6
Customer 30	6	6	6	5	6	5	6	6	5	6	6	6	5	5	4	5	6	4	5	5	5	6
Customer 31	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 32	7	7	7	7	7	7	7	7	7	6	2	6	2	6	7	7	5	6	6	6	7	5
Customer 33	5	6	5	5	5	4	4	5	5	5	5	5	5	5	6	5	5	5	6	5	5	5
Customer 34	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6
Customer 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F25: Personal Details for Customers at Dealership H

DEALERSHIP H					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Florida	No		45-54
Customer 2	No	Pretoria	Yes	Manufacturing	25-34
Customer 3	No	Mondeor	No		>55
Customer 4	No	Delville	Yes	Banking	25-34
Customer 5	No	Linden	No		25-34
Customer 6	No	Kempton Park	No		25-34
Customer 7	No	Kempton Park	No		25-34
Customer 8	No	Northcliff	No		35-44
Customer 9	No	Soweto	Yes	Medical	25-34
Customer 10	No	Kempton Park	No		35-44
Customer 11	No	Melville	Yes	Banking	35-44
Customer 12	No	Albemarle	No		25-34
Customer 13	No	Florida	No		35-44
Customer 14	No	Vereeniging	No		35-44
Customer 15	No	Brixton	Yes	Fire Department	25-34
Customer 16	No	Meredale	Yes	Banking	<25
Customer 17	No	Centurion	No		25-34
Customer 18	No	Winchester Hills	No		>55
Customer 19	No	Belville	No		25-34
Customer 20	No	Roodepoort	Yes		35-44
Customer 21	Yes	Sandton	No		45-54
Customer 22	No	Winchester Hills	No		35-44
Customer 23	Yes	Florida Hills	No		25-34
Customer 24	Yes	Naturena	Yes	Finance	25-34
Customer 25	Yes	Germiston	No		25-34
Customer 26	Yes	Soweto	No		35-44

Table F26: Expectation Scores for Customers at Dealership H

DEALERSHIP H																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7	7
Customer 2	4	5	6	5	7	7	7	7	6	6	6	7	7	7	7	6	6	6	4	5	6	6
Customer 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	3	6	6	4	7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 5	6	6	5	7	7	6	7	7	7	6	6	6	7	7	6	6	7	7	7	6	7	6
Customer 6	4	5	6	5	7	7	7	6	7	6	6	6	6	7	7	7	6	6	6	6	7	6
Customer 7	5	5	7	5	6	5	5	7	5	5	7	7	7	7	6	7	7	7	7	6	7	7
Customer 8	6	6	6	7	6	7	7	7	6	7	7	6	5	7	6	6	5	6	5	5	5	6
Customer 9	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 10	5	6	6	6	7	7	7	7	7	6	7	7	7	7	7	7	6	7	7	6	7	6
Customer 11	7	6	6	6	7	7	7	6	6	6	7	7	7	7	7	7	7	6	6	7	6	6
Customer 12	6	6	7	7	7	6	7	7	6	5	6	7	7	7	6	6	7	7	6	7	7	6
Customer 13	6	6	6	6	7	7	7	7	7	7	7	6	6	7	7	7	7	6	6	6	7	7
Customer 14	6	6	6	7	6	7	7	7	7	6	7	7	7	7	7	7	7	6	7	6	7	7
Customer 15	7	6	6	6	6	5	5	6	6	5	5	5	5	5	5	6	4	6	6	6	6	5
Customer 16	6	6	6	7	7	7	6	7	7	6	7	7	6	7	6	7	7	6	7	7	7	6
Customer 17	7	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 18	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7
Customer 20	6	6	7	6	7	6	7	7	6	6	6	7	6	7	7	7	6	7	7	7	7	7
Customer 21	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 22	6	6	7	7	7	7	7	7	7	5	5	5	5	7	7	7	7	7	7	7	7	7

Customer 23	5	4	4	5	6	4	4	1	4	2	5	6	7	7	5	5	7	7	4	6	6	7
Customer 24	7	7	7	7	1	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	5	5	5	4	3	5	5	5	6	6	6	6	5	5	5	6	6	6	6	6	6	5

Table F27: Importance Weighting Scores for Customers at Dealership H

DEALERSHIP H					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	40	30	10	10
Customer 2	30	15	15	20	20
Customer 3	20	20	20	20	20
Customer 4	20	20	20	20	20
Customer 5	10	50	10	20	10
Customer 6	10	20	20	30	20
Customer 7	10	60	10	10	10
Customer 8	5	40	30	10	15
Customer 9	10	50	20	10	10
Customer 10	15	30	25	20	10
Customer 11	20	20	20	20	20
Customer 12	20	20	20	20	20
Customer 13	1	90	2	5	2
Customer 14	30	30	10	20	10
Customer 15	20	30	10	20	20
Customer 16	10	40	10	20	20
Customer 17	10	40	25	15	10
Customer 18	16	21	21	21	21
Customer 19	20	25	25	15	15
Customer 20	12.5	12.5	25	25	25
Customer 21	20	20	20	20	20
Customer 22	20	50	10	10	10
Customer 23	30	10	20	20	20
Customer 24	10	20	20	20	30
Customer 25	25	15	15	30	15
Customer 26	20	20	30	10	20

Table F28: Perception Scores for Customers at Dealership H

DEALERSHIP H																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	6	5	7	6	7	7	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6
Customer 2	4	4	6	6	4	4	3	4	4	6	6	5	4	4	5	5	4	4	5	4	4	4
Customer 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 4	4	5	6	6	6	7	6	6	6	6	7	6	7	6	6	7	6	7	7	6	6	6
Customer 5	5	6	4	3	3	6	5	5	4	6	5	6	6	7	5	6	6	5	7	6	6	6
Customer 6	5	4	5	5	5	6	6	5	5	6	5	6	5	5	5	6	6	5	5	5	6	6
Customer 7	3	6	7	4	5	6	4	5	5	4	5	7	6	5	3	6	4	6	7	6	5	7
Customer 8	5	5	7	6	7	6	6	7	6	6	6	7	5	6	6	6	7	7	5	5	6	6
Customer 9	5	6	6	6	6	6	7	7	7	7	7	7	7	6	7	7	7	7	1	7	7	7
Customer 10	4	3	5	2	4	4	3	6	3	6	6	6	5	4	4	5	4	4	3	5	4	4
Customer 11	6	6	7	6	7	7	6	7	6	6	7	7	7	7	7	6	7	6	6	6	6	6
Customer 12	7	7	7	7	6	7	7	7	6	6	6	7	7	6	6	6	7	7	4	5	6	6
Customer 13	6	7	7	6	4	6	6	6	5	7	6	6	5	6	6	6	6	6	6	6	6	6
Customer 14	4	5	6	6	6	6	7	6	6	5	6	7	6	6	6	6	6	6	5	6	6	6
Customer 15	7	7	7	7	7	6	6	6	6	6	5	6	5	6	6	6	6	6	6	6	6	7
Customer 16	4	4	6	6	2	3	4	3	3	4	5	4	5	5	6	6	6	5	4	5	3	4
Customer 17	6	6	7	5	5	5	6	5	5	7	5	6	6	5	5	5	5	5	4	6	5	6
Customer 18	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	4	4	6	4	6	6	3	4	6	6	6	6	6	4	6	6	4	7	4	7	6	5
Customer 20	6	6	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7	7	6	6	7	7
Customer 21	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 22	5	5	7	5	6	7	5	6	6	6	6	7	6	6	6	6	6	7	7	7	7	6

Customer 23	4	4	4	6	4	2	3	1	3	2	1	4	4	4	4	4	4	4	4	3	4	5
Customer 24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F29: Personal Details for Customers at Dealership I

DEALERSHIP I					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Benoni	No		25-34
Customer 2	No	Midrand	Yes	Architect	35-44
Customer 3	No	Randburg	No		<25
Customer 4	No	Centurion	Yes	Health Care	35-44
Customer 5	No	Hartbeespoort	No		35-44
Customer 6	No	Ennerdale	Yes	Panelbeating	25-34
Customer 7	No	Midrand	Yes	IT	<25
Customer 8	No	Lonehill	No		25-34
Customer 9	Yes	Vereeniging	No		25-34
Customer 10	No	Woodmead	No		35-44
Customer 11	No	Woodmead	Yes		35-44
Customer 12	No	Bryanston	No		25-34
Customer 13	No	Morningside	No		25-34
Customer 14	No	Strathavon	Yes	Financial Services	>55
Customer 15	No	Elma Park	Yes	Office Automation Quality Management	>55
Customer 16	No	Kibler Park	Yes	Printing Supplies	>55
Customer 17	No	Benoni	No		45-54
Customer 18	No	Marlboro	No		25-34
Customer 19	No	Pretoria	No		35-44
Customer 20	No	Pretoria	Yes	Medical	25-34
Customer 21	No	Lenasia South	Yes	Banking	25-34
Customer 22	No	Kyalami	No		25-34
Customer 23	No	Woodmead	No		45-54
Customer 24	No	Bucleuch	No		25-34
Customer 25	No	Northcliff	Yes	Banking	35-44
Customer 26	No	Kyalami	No		45-54
Customer 27	No	Randburg	Yes	Pharmaceutical	35-44
Customer 28	No	Kyalami	No		25-34
Customer 29	No		No		35-44
Customer 30	No	Little Falls	No		35-44
Customer 31	No	Sandton	No		35-44
Customer 32	Yes	North Riding	No		25-34
Customer 33	No	Pretoria	No		<25
Customer 34	No	Sandton	Yes	Consulting	35-44
Customer 35	No	Woodmead	No		25-34
Customer 36	No	Mondeor	Yes	Broadcast Video Service Engineering	35-44
Customer 37	No	Wendywood	Yes	Consulting	35-44

Customer 38	No	Sunninghill	No		35-44
Customer 39	No	Sandton	No		25-34
Customer 40	No	Sharonlea	Yes	Private Banking	25-34
Customer 41	No	Lenasia	Yes	Insurance Broker	35-44
Customer 42	Yes	Douglasdale	Yes	Client Service, Advertising	25-34
Customer 43	No	Buccleuch	Yes	Courier Services	25-34
Customer 44	No		No		25-34
Customer 45	No	Edenvale	Yes	Medical	35-44
Customer 46	No	Sunninghill	Yes	Hotel Industry	25-34
Customer 47	No	Krugersdorp	Yes		35-44
Customer 48	No	Paulshoff	No		25-34
Customer 49	No	Benoni	Yes	Medical	35-44
Customer 50	No	Sunninghill	Yes	Trader	25-34
Customer 51	No	Wendywood	Yes	Tourism	35-44
Customer 52	No	Buccleuch	Yes	Insurance	25-34
Customer 53	No		No		<25
Customer 54	No	Kyalami	No		25-34
Customer 55	Yes	Soweto	No		25-34
Customer 56	Yes	Parkhurst	Yes	Management Consulting	35-44

Table F30: Expectation Scores for Customers at Dealership I

DEALERSHIP I																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	6	6	6	6	6	5	6	6	5	6	6	6	5	6	6	6	6	5	6	5	5	6
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7
Customer 3	3	3	7	7	7	6	7	7	6	6	7	7	6	7	7	6	7	7	6	6	7	6
Customer 4	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 6	6	6	7	6	6	6	6	6	6	6	7	7	6	6	6	6	6	7	7	7	7	7
Customer 7	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 8	4	6	6	5	6	6	7	6	7	6	6	6	6	7	6	6	6	5	6	6	6	6
Customer 9	5	6	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	6	7	7	7	7
Customer 10	6	5	6	3	6	6	6	6	5	6	6	7	5	6	6	6	6	6	6	6	6	6
Customer 11	5	6	7	5	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 12	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 13	6	7	7	6	7	7	6	6	6	7	7	7	7	6	7	6	7	7	6	7	7	7
Customer 14	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 15	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 17	5	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 18	6	6	6	6	7	7	7	7	7	6	7	7	7	6	6	7	6	7	7	7	6	7
Customer 19	5	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	6	7	7	6	7	6
Customer 20	6	6	6	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6	6	7	6
Customer 21	6	6	6	5	6	6	7	6	7	6	7	7	6	7	6	5	6	5	6	5	5	5
Customer 22	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	5	5	6
Customer 23	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 24	6	6	7	7	6	7	7	6	7	6	7	7	6	7	7	7	7	5	5	7	7	7
Customer 25	4	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	6	6	6	5	6	6	6	6	6	6	6	6	6	7	7	7	6	6	6	6	6	6

Customer 27	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	6	6	6	7	7	7
Customer 28	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 30	6	6	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 31	2	6	2	5	5	4	6	6	5	5	6	6	7	6	6	5	6	7	5	7	6	6
Customer 32	7	7	7	7	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 33	6	6	7	7	7	7	7	7	7	7	5	7	6	6	7	7	7	7	7	6	7	6
Customer 34	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 35	4	5	5	5	3	3	6	4	6	5	6	4	4	6	6	5	5	5	5	4	4	4
Customer 36	6	6	7	6	7	7	7	7	6	7	7	7	7	7	7	7	6	7	7	7	7	7
Customer 37	4	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	6	6
Customer 38	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 39	6	6	6	5	7	6	6	6	6	6	6	7	6	6	6	7	7	7	7	7	7	7
Customer 40	6	4	7	5	3	6	5	6	7	4	5	6	4	6	7	6	7	5	6	6	5	4
Customer 41	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
Customer 42	6	4	4	5	7	7	6	7	7	5	7	7	5	7	5	7	6	6	5	4	7	7
Customer 43	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 44	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 45	5	6	6	6	7	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	6	7
Customer 46	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 47	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6
Customer 48	6	5	7	7	7	7	6	7	7	7	7	7	6	7	7	7	7	7	6	7	7	6
Customer 49	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 50	4	4	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 51	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 52	7	7	7	5	6	7	5	7	7	6	7	7	6	7	7	7	7	7	7	7	7	7
Customer 53	6	6	6	4	6	7	5	6	7	7	7	7	6	4	5	7	6	6	7	6	6	5
Customer 54	4	5	5	5	5	6	6	6	6	6	6	6	6	5	6	6	6	7	6	7	7	6
Customer 55	6	6	6	6	6	7	7	7	7	7	7	7	6	6	7	7	6	6	6	7	7	7
Customer 56	6	7	7	6	7	7	6	6	7	5	6	7	7	7	6	7	7	6	5	6	6	6

Table F31: Importance Weighting Scores for Customers at Dealership I

DEALERSHIP I					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	20	20	20	20	20
Customer 2	5	70	10	10	5
Customer 3	10	40	20	20	10
Customer 4	5	60	20	10	5
Customer 5	10	50	20	10	10
Customer 6	20	20	20	20	20
Customer 7	20	30	10	30	10
Customer 8	10	40	20	10	20
Customer 9	40	40	10	5	5
Customer 10	10	50	20	10	10
Customer 11	0	25	25	25	25
Customer 12	10	50	20	10	10
Customer 13	40	20	20	10	10
Customer 14	20	30	30	10	10
Customer 15	10	50	20	10	10
Customer 16	20	50	10	10	10
Customer 17	10	40	20	20	10
Customer 18	10	30	30	10	20
Customer 19	10	35	25	20	10
Customer 20	15	35	15	20	15
Customer 21	10	40	20	20	10
Customer 22	20	20	20	20	20
Customer 23	5	80	5	5	5
Customer 24	10	60	10	10	10
Customer 25	5	80	5	5	5
Customer 26	15	30	15	20	20
Customer 27	10	60	10	10	10
Customer 28	20	20	20	20	20
Customer 29	20	20	20	20	20
Customer 30	10	30	20	10	30
Customer 31	25	25	25	12.5	12.5
Customer 32	10	60	10	10	10
Customer 33	20	10	25	25	20
Customer 34	20	25	25	20	10
Customer 35	40	20	20	10	10
Customer 36	5	35	10	30	20
Customer 37	5	80	0	10	5

Customer 38	20	20	20	20	20
Customer 39	5	50	10	5	30
Customer 40	10	40	25	15	10
Customer 41	10	30	30	15	15
Customer 42	5	40	25	20	10
Customer 43	20	20	20	20	20
Customer 44	5	60	20	10	5
Customer 45	10	20	20	30	20
Customer 46	20	20	20	20	20
Customer 47	15	10	20	40	15
Customer 48	25	20	25	20	10
Customer 49	5	50	15	15	15
Customer 50	10	40	10	20	20
Customer 51	20	20	20	20	20
Customer 52	25	25	30	10	10
Customer 53	20	20	30	20	10
Customer 54	20	30	20	20	10
Customer 55	10	30	20	30	10
Customer 56	10	60	10	15	5

Table F32: Perception Scores for Customers at Dealership I

DEALERSHIP I																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 2	7	6	7	6	6	7	6	6	6	7	7	7	6	7	7	7	7	7	7	6	6	6
Customer 3	6	6	7	6	6	6	5	6	6	6	6	7	7	6	6	6	7	7	6	6	6	6
Customer 4	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	5
Customer 8	6	6	6	4	6	5	6	6	4	6	6	6	6	6	6	6	6	6	5	6	5	5
Customer 9	5	5	7	5	7	6	6	7	5	6	6	6	6	6	6	6	6	6	7	6	6	6
Customer 10	7	6	7	6	3	6	3	6	5	6	6	6	6	5	4	6	5	6	6	6	6	6
Customer 11	4	4	7	5	6	6	6	6	6	7	7	6	6	7	6	7	6	6	5	7	7	6
Customer 12	6	6	7	5	6	5	5	6	4	4	6	6	5	6	6	6	6	6	6	6	4	5
Customer 13	7	7	6	6	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	6
Customer 14	6	6	7	5	6	6	6	6	6	7	6	6	6	7	7	7	6	6	6	6	6	6
Customer 15	5	5	6	6	6	6	4	5	5	6	6	6	5	6	6	7	6	6	6	6	6	6
Customer 16	6	6	7	7	6	7	6	7	7	6	7	7	7	7	6	7	7	7	7	7	7	7
Customer 17	6	6	7	6	5	6	6	7	6	7	6	6	6	6	6	6	6	6	6	6	5	6
Customer 18	6	5	6	5	3	5	6	4	4	4	5	5	5	5	5	6	5	6	4	6	6	5
Customer 19	5	5	6	5	6	6	5	6	4	5	6	6	5	5	5	6	6	5	6	5	5	5
Customer 20	6	6	6	6	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 21	5	6	6	5	5	6	6	6	7	6	6	5	6	6	7	7	6	6	5	6	6	5
Customer 22	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	5	7	5	5	6
Customer 23	7	7	7	5	5	6	6	5	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Customer 24	4	6	7	6	5	6	4	4	4	7	6	6	5	6	4	7	5	4	4	5	4	5
Customer 25	5	5	5	5	3	3	3	3	3	3	4	3	3	3	4	4	4	4	3	4	4	4
Customer 26	6	4	6	6	5	6	4	6	6	6	6	6	6	6	6	6	5	6	6	6	6	6

Customer 27	5	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	7	6	6	
Customer 28	6	6	6	4	4	4	5	4	4	6	6	7	7	6	6	6	7	7	6	6	4	6
Customer 29	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 30	6	7	6	6	7	7	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7	7
Customer 31	6	7	6	6	6	6	6	6	6	6	6	4	5	5	6	5	6	6	5	6	5	6
Customer 32	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 33	6	6	7	6	7	7	5	7	7	5	4	7	7	7	7	7	7	6	7	5	7	7
Customer 34	6	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7	7	6	7	7	6	7
Customer 35	7	6	6	5	7	7	7	6	5	6	6	7	5	5	5	5	5	5	7	6	5	6
Customer 36	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 37	4	5	6	6	7	7	7	7	7	6	6	6	7	7	7	7	6	6	5	6	6	6
Customer 38	4	5	7	5	6	7	5	6	6	5	7	7	7	7	7	7	7	7	6	7	7	7
Customer 39	6	6	7	6	6	7	5	5	6	6	6	6	6	6	6	6	6	7	7	7	7	7
Customer 40	6	7	7	5	6	7	7	7	7	5	6	6	6	6	6	6	7	5	6	6	5	5
Customer 41	5	4	4	5	6	6	6	6	6	5	5	5	5	5	5	6	6	6	5	6	6	6
Customer 42	3	3	4	4	5	4	6	6	6	5	6	6	5	7	7	6	6	5	6	4	5	7
Customer 43	7	7	7	6	7	6	7	7	7	7	7	6	6	6	6	6	6	6	7	6	7	6
Customer 44	6	7	6	6	7	6	5	7	7	7	7	7	7	6	7	7	7	7	7	7	5	7
Customer 45	5	6	6	5	5	6	5	6	7	7	6	7	5	5	6	7	6	6	7	6	6	6
Customer 46	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 47	7	7	7	7	7	6	5	6	6	7	6	7	6	6	6	6	7	6	7	6	6	6
Customer 48	6	7	7	5	7	7	7	7	7	7	7	6	5	7	7	7	7	7	4	7	5	6
Customer 49	5	5	5	5	5	6	6	6	4	6	6	6	6	6	6	6	5	6	6	6	6	6
Customer 50	5	5	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 51	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 52	6	7	6	5	7	5	7	7	6	7	6	7	6	6	6	6	6	5	7	6	7	7
Customer 53	5	6	6	4	7	7	6	6	7	6	7	6	6	5	6	7	6	7	7	6	6	7
Customer 54	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7
Customer 55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F33: Personal Details for Customers at Dealership J

DEALERSHIP J					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Sandton	Yes		25-34
Customer 2	No	Paulshof	Yes	Insurance	25-34
Customer 3	No	Observatory	Yes	IT	35-44
Customer 4	No	Sandton	Yes	Printing	45-54
Customer 5	No	Melrose	No		25-34
Customer 6	No	Waverley	No		>55
Customer 7	No	Roosevelt Park	No		45-54
Customer 8	No	Jhb	No		45-54
Customer 9	No	Sydenham	Yes	Sales Director	35-44
Customer 10	No	Bramley	No		25-34
Customer 11	No	Corlett Gardens	Yes	Customer Service	25-34
Customer 12	No	Highlands North	No		35-44
Customer 13	No	Sandton	No		>55
Customer 14	No	Fourways	Yes	Accounting	25-34
Customer 15	No	Fourways	Yes	Banking	35-44
Customer 16	No	Lenasia	Yes	3M	35-44
Customer 17	No	Little Falls	Yes	IT	35-44
Customer 18	No	Benoni	No		25-34
Customer 19	No	Sandton	No		35-44
Customer 20	No	Sandhurst	Yes	Financial Services	35-44
Customer 21	No	Sandringham	No		>55
Customer 22	No	Sydenham	Yes	Financial Services	45-54
Customer 23	No	Senderwood	Yes	Casino	45-54
Customer 24	No	Sunninghill	No		25-34
Customer 25	No	Sunninghill	Yes		35-44
Customer 26	No	Northcliff	Yes	Banking	35-44
Customer 27	No	Douglasdale	Yes	Sales	25-34
Customer 28	No	Bedford park	No		>55
Customer 29	No	Mondeor	Yes		35-44
Customer 30	No	Sandton	Yes		25-34
Customer 31	No	Sandton	No		<25
Customer 32	No	Robertsham	Yes	Travel	25-34
Customer 33	No	Saxonwold	No		45-54
Customer 34	No	Melrose	Yes	Engineering	45-54
Customer 35	No	Lyndhurst	Yes	Consulting	25-34
Customer 36	No	Oaklands	No		35-44
Customer 37	No	Morningside	No		>55

Customer 38	No	Jhb	Yes	Real Estate	35-44
Customer 39	Yes	Kempton Park	Yes	IT	35-44
Customer 40	No	Melrose	Yes	Banking	35-44
Customer 41	No	Jhb	No		35-44
Customer 42	No	Pretoria	Yes	Banking	25-34
Customer 43	No	Constantia Kloof	Yes	Banking	35-44
Customer 44	No	Jhb	No		25-34
Customer 45	No	Emmarentia	No		45-54
Customer 46	No	Jhb	Yes	Media	35-44
Customer 47	Yes	Jhb	No		25-34
Customer 48	No	Jhb	Yes	Telecoms	35-44
Customer 49	No	North Riding	No		35-44
Customer 50	No	Bryanston	Yes	Financial Services	35-44
Customer 51	No	Honeydew	No		35-44
Customer 52	No	Kew	No		25-34
Customer 53	No	Bryanston	Yes	Consulting and Telecoms	25-34
Customer 54	No	Parkhurst	No		35-44
Customer 55	No	Sandton	No		25-34
Customer 56	No	Edenvale	No		35-44
Customer 57	No	Jhb	Yes	Financial Services	35-44
Customer 58	No	Centurion	No		>55
Customer 59	Yes	Pineslopes	No		25-34
Customer 60	Yes	Pretoria	Yes	IT	25-34
Customer 61	Yes	Honeydew	Yes	Verification Agency (BEE)	25-34
Customer 62	Yes	Fourways	Yes	Cellular	35-44
Customer 63	Yes	Randburg	Yes	SABC	>55
Customer 64	Yes	Douglasdale	No		25-34
Customer 65	Yes	Kensington	Yes	City of Johannesburg	>55
Customer 66	Yes	Radiokop	No		25-34
Customer 67	Yes	Northcliff	No		25-34
Customer 68	Yes	Fourways	Yes	Branding Company	25-34

Table F34: Expectation Scores for Customers at Dealership J

DEALERSHIP J																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 2	7	7	7	7	7	7	7	7	7	7	7	6	6	7	7	7	7	7	7	7	7	
Customer 3	4	7	7	4	7	7	7	7	6	6	7	7	5	7	7	7	7	6	6	6	7	
Customer 4	6	6	7	6	5	5	3	4	4	3	4	5	5	5	5	6	5	6	4	5	5	
Customer 5	6	6	6	3	7	7	7	7	5	6	5	6	5	5	5	6	6	4	5	5	5	
Customer 6	5	6	6	4	6	6	6	6	6	6	6	6	5	6	6	7	5	7	6	6	6	
Customer 7	3	4	6	6	7	7	6	7	7	6	7	7	7	6	7	7	7	6	5	7	7	
Customer 8	1	2	1	1	3	2	1	1	2	1	2	1	2	1	2	1	3	1	1	1	1	
Customer 9	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 10	4	5	6	5	7	5	5	6	5	6	5	5	6	6	6	6	5	5	5	6	6	
Customer 11	7	7	7	7	7	7	7	7	6	7	7	7	5	5	7	7	7	5	7	7	7	
Customer 12	6	7	7	7	7	7	7	7	7	6	7	7	6	7	7	7	6	6	6	6	7	
Customer 13	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 14	5	6	7	7	7	7	7	6	7	6	6	6	7	6	6	6	5	7	6	6	6	
Customer 15	5	5	7	5	7	7	6	7	5	7	7	7	6	7	6	6	7	6	5	6	5	
Customer 16	5	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 17	5	6	6	5	5	6	7	6	6	5	6	6	6	6	6	6	6	5	6	6	6	
Customer 18	6	6	6	6	6	6	6	6	6	6	6	7	7	7	6	7	7	7	7	7	7	
Customer 19	7	6	6	6	6	7	7	7	6	6	7	7	7	6	6	7	7	7	7	6	6	
Customer 20	5	6	6	6	7	7	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	
Customer 21	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 22	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	6	7	6	6	6	7	

Customer 23	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 24	5	6	6	5	7	7	7	7	5	6	6	7	6	7	7	7	7	6	7	7	7	6
Customer 25	3	5	5	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	6	6	6	6	7	7	7	7	7	7	7	7	7	7	6	7	6	7	6	7	7	7
Customer 27	7	7	7	7	7	7	5	7	5	7	7	7	6	7	7	7	7	7	6	7	7	7
Customer 28	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 29	4	6	6	6	5	5	5	5	5	6	6	6	5	5	6	6	6	6	6	6	6	5
Customer 30	7	7	6	7	7	6	7	7	4	6	7	7	5	6	6	6	5	7	4	7	5	6
Customer 31	7	7	7	6	6	6	4	7	7	7	6	7	5	7	7	7	7	7	6	7	7	6
Customer 32	5	5	6	5	6	6	6	6	6	6	6	6	6	6	5	5	5	6	6	6	6	6
Customer 33	4	4	6	5	7	7	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 34	5	5	6	6	3	4	5	5	4	5	5	5	6	6	6	6	5	6	6	6	6	6
Customer 35	6	7	5	5	7	7	7	6	7	3	6	7	7	7	7	6	4	6	7	6	7	6
Customer 36	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7
Customer 37	7	7	7	7	7	7	5	7	5	7	7	7	7	5	5	7	7	7	7	7	7	7
Customer 38	6	6	6	6	7	7	7	7	6	7	7	7	6	7	7	7	7	7	6	6	6	6
Customer 39	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7
Customer 40	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 41	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 42	7	7	7	7	6	7	7	5	7	6	7	7	7	5	7	7	4	5	7	4	7	7
Customer 43	4	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 44	3	5	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 45	6	6	6	6	6	4	3	4	3	4	4	5	4	5	5	5	5	4	5	5	3	4
Customer 46	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 47	7	7	7	7	7	6	7	7	7	7	7	7	6	7	7	7	7	6	6	6	7	7
Customer 48	5	6	7	6	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 49	5	6	4	7	7	7	7	7	6	7	7	6	6	6	7	6	7	5	5	6	6	6
Customer 50	6	6	5	4	3	5	3	3	4	5	5	5	4	5	6	6	5	5	6	6	5	5

Customer 51	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 52	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 53	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	5	5	5	5	5	6	6	6	6	6	6	7	6	6	6	6	6	6	5	6	7	6
Customer 55	6	5	6	5	7	6	6	6	7	4	6	7	6	6	7	5	6	4	3	5	5	6
Customer 56	4	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 57	4	5	7	5	7	7	7	7	7	6	7	7	5	6	7	7	7	5	5	6	7	6
Customer 58	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 59	5	7	7	7	6	7	5	6	5	7	7	7	7	7	7	7	5	7	5	7	5	7
Customer 60	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7
Customer 61	4	5	6	4	6	6	7	6	7	7	6	7	7	6	6	7	7	7	6	7	7	6
Customer 62	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 63	7	7	7	7	6	7	5	6	6	7	7	7	7	7	7	7	6	7	5	7	6	6
Customer 64	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	7	6	6	5	5	7	6
Customer 65	2	4	5	5	7	6	6	6	7	6	6	5	7	5	7	7	5	6	6	5	5	7
Customer 66	5	5	6	7	7	7	7	6	6	6	7	7	6	6	6	6	5	6	6	5	7	7
Customer 67	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 68	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7

Table F35: Importance Weighting Scores for Customers at Dealership J

DEALERSHIP J					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	10	50	20	10	10
Customer 2	10	50	15	20	5
Customer 3	15	25	25	25	10
Customer 4	30	20	20	15	15
Customer 5	20	35	15	20	10
Customer 6	0	80	0	20	0
Customer 7	5	25	25	25	20
Customer 8	20	50	10	10	10
Customer 9	10	50	20	10	10
Customer 10	6	70	10	8	6
Customer 11	5	30	30	20	15
Customer 12	20	20	20	20	20
Customer 13	10	40	20	25	5
Customer 14	10	40	30	10	10
Customer 15	20	50	10	10	10
Customer 16	10	20	20	20	30
Customer 17	15	25	20	25	15
Customer 18	5	60	20	5	10
Customer 19	10	40	20	15	15
Customer 20	10	40	20	20	10
Customer 21	20	20	20	20	20
Customer 22	10	40	20	20	10
Customer 23	10	60	10	10	10
Customer 24	30	15	15	20	20
Customer 25	1	50	9	20	20
Customer 26	15	50	20	10	5
Customer 27	22	22	22	17	17
Customer 28	10	40	10	20	20
Customer 29	15	50	15	10	10
Customer 30	15	50	10	15	10
Customer 31	10	50	20	10	10
Customer 32	10	50	20	10	10
Customer 33	20	20	20	20	20
Customer 34	10	60	0	10	20
Customer 35	20	20	20	25	15
Customer 36	15	30	25	15	15
Customer 37	10	70	10	5	5

Customer 38	10	30	20	20	20
Customer 39	20	20	15	30	15
Customer 40	12	52	12	12	12
Customer 41	15	20	10	5	50
Customer 42	20	50	20	5	5
Customer 43	10	40	20	20	10
Customer 44	10	40	20	20	10
Customer 45	10	50	20	10	10
Customer 46	10	30	15	20	25
Customer 47	10	40	30	10	10
Customer 48	5	45	10	25	15
Customer 49	10	50	20	10	10
Customer 50	25	30	15	15	15
Customer 51	5	5	5	5	80
Customer 52	10	40	10	30	10
Customer 53	15	40	20	15	10
Customer 54	20	40	20	20	0
Customer 55	10	35	20	25	10
Customer 56	20	30	30	10	10
Customer 57	10	40	10	20	20
Customer 58	15	30	15	40	0
Customer 59	10	30	20	20	20
Customer 60	10	50	20	10	10
Customer 61	10	30	20	20	20
Customer 62	5	75	10	5	5
Customer 63	5	60	15	10	10
Customer 64	5	80	5	5	5
Customer 65	25	40	20	10	5
Customer 66	20	25	10	20	25
Customer 67	20	20	20	20	20
Customer 68	10	50	20	10	10

Table F36: Perception Scores for Customers at Dealership J

DEALERSHIP J																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	7	7	7	5	7	6	7	7	6	7	7	7	5	6	6	6	7	7	7	6	6	6
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6
Customer 3	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Customer 4	6	6	5	5	5	5	4	4	4	5	5	5	4	4	4	6	5	5	5	5	5	5
Customer 5	6	6	6	5	6	5	5	6	5	4	5	5	5	6	6	5	6	6	6	6	4	6
Customer 6	6	6	6	4	6	6	6	6	6	6	6	6	5	6	6	6	4	6	6	5	6	5
Customer 7	6	7	7	7	6	6	6	7	6	7	7	6	6	7	7	7	7	6	7	7	6	6
Customer 8	7	6	7	5	6	7	5	5	6	6	6	7	7	7	6	6	7	6	7	6	7	6
Customer 9	5	7	6	6	6	4	4	4	3	5	6	4	6	6	6	6	6	4	6	5	5	5
Customer 10	5	5	5	5	6	6	5	5	6	6	6	6	5	5	6	6	3	6	6	6	4	5
Customer 11	6	6	5	5	3	3	1	4	4	5	5	5	3	4	5	5	4	4	6	4	4	4
Customer 12	6	6	6	7	5	5	5	5	5	5	5	6	6	5	5	6	6	5	6	6	6	5
Customer 13	6	7	7	6	6	6	6	6	6	6	7	7	7	6	6	7	6	7	7	7	7	7
Customer 14	4	5	6	4	5	4	2	4	2	5	5	5	3	3	5	6	4	5	6	5	5	5
Customer 15	7	7	7	6	6	7	7	7	6	7	6	7	6	7	7	7	7	6	6	6	6	6
Customer 16	6	6	7	5	7	7	7	7	7	7	7	5	6	7	7	7	7	7	7	7	7	6
Customer 17	6	6	6	6	6	7	7	7	6	6	6	7	6	7	7	7	6	6	6	5	6	6
Customer 18	6	6	7	5	7	5	5	6	5	7	7	7	5	6	5	6	6	7	5	7	5	5
Customer 19	6	6	6	5	5	7	7	6	6	6	6	6	5	6	6	6	6	6	7	7	6	6
Customer 20	7	7	7	7	2	2	1	7	2	7	7	7	5	7	7	7	7	5	7	5	4	4
Customer 21	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 22	5	6	6	5	5	5	5	6	5	6	5	6	5	6	6	6	5	6	4	5	5	5

Customer 23	7	7	7	7	5	5	5	5	7	6	6	6	6	5	5	7	5	5	4	5	5	5
Customer 24	5	7	6	6	5	5	5	5	5	6	5	6	5	5	6	6	5	4	5	5	5	5
Customer 25	7	7	7	7	5	5	3	5	3	6	5	5	4	4	2	5	3	4	7	5	3	3
Customer 26	6	6	6	6	4	5	5	6	5	5	5	5	4	5	6	6	5	5	6	5	5	5
Customer 27	6	6	6	4	6	7	7	6	5	7	7	7	7	7	7	7	6	7	7	7	7	7
Customer 28	7	6	7	7	7	7	6	7	7	7	7	7	7	6	6	7	7	7	7	6	7	6
Customer 29	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	7	6	6	6	6	6	6
Customer 30	7	7	7	7	6	7	6	6	6	6	6	7	6	7	7	7	6	7	7	7	7	7
Customer 31	7	7	7	7	5	6	5	7	7	6	6	7	5	7	7	7	7	7	5	7	7	6
Customer 32	7	6	6	6	7	7	7	7	7	6	7	7	7	6	6	7	7	7	6	7	7	7
Customer 33	5	6	6	5	6	6	6	6	6	7	7	7	7	7	7	7	7	6	6	6	7	7
Customer 34	5	5	6	6	4	5	5	4	4	4	4	5	6	5	6	6	6	6	6	5	5	6
Customer 35	7	7	7	7	4	7	5	7	4	6	6	7	7	7	7	7	4	6	7	6	6	5
Customer 36	7	7	6	7	5	6	3	6	6	6	6	7	5	6	5	6	6	7	7	7	5	6
Customer 37	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 38	6	6	6	6	4	4	3	4	5	4	4	3	3	2	3	3	4	4	6	4	3	2
Customer 39	6	6	6	6	6	4	4	6	4	6	6	6	4	6	6	6	6	6	6	6	6	4
Customer 40	7	7	7	7	5	7	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 41	5	5	6	6	5	5	5	5	5	6	6	6	6	6	6	6	6	5	4	5	4	5
Customer 42	7	7	7	6	5	5	7	5	5	6	6	6	5	7	7	6	6	5	6	5	6	7
Customer 43	6	7	7	6	3	3	1	3	3	5	5	3	6	5	4	6	4	4	5	4	4	4
Customer 44	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	5	7	7	7
Customer 45	5	6	6	5	4	4	3	4	4	5	5	5	4	5	5	5	5	5	5	5	4	4
Customer 46	6	6	5	5	5	5	5	5	5	6	5	5	5	5	6	5	5	5	4	5	5	4
Customer 47	7	7	7	6	6	6	6	6	6	6	6	6	6	6	7	7	6	6	6	6	6	6
Customer 48	7	7	7	6	6	7	6	7	5	6	7	7	6	7	6	6	6	6	6	7	6	6
Customer 49	5	7	7	6	6	6	6	6	5	6	4	6	4	6	6	6	6	6	6	6	5	6

Customer 50	7	6	6	6	4	5	3	4	4	4	5	6	6	6	6	6	5	5	6	5	5	5
Customer 51	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 52	7	7	7	7	6	5	4	5	5	6	6	6	5	6	7	7	6	5	7	6	6	5
Customer 53	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	5	5	5	5	5	6	5	5	4	6	6	5	5	5	5	5	5	5	5	5	5	5
Customer 55	7	6	7	7	4	5	2	5	6	6	5	6	5	6	7	6	6	6	5	2	4	5
Customer 56	5	6	6	6	5	6	6	6	6	5	6	5	6	6	6	5	6	6	5	5	6	5
Customer 57	7	7	7	7	5	6	5	6	6	6	6	6	5	6	5	7	6	6	7	6	5	6
Customer 58	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F37: Personal Details for Customers at Dealership K

DEALERSHIP K					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Riverclub	Yes	Property Development	45-54
Customer 2	No	Northcliff	No		<25
Customer 3	No	Springs	Yes	Bulk mining explosives	35-44
Customer 4	No	Morningside	No		>55
Customer 5	No	Sandton	Yes	Printing Services	25-34
Customer 6	No	Jhb	No		<25
Customer 7	No	Bryanston	Yes	Consulting	35-44
Customer 8	Yes	Fourways	No		<25
Customer 9	No	Bryanston	No		>55
Customer 10	No	Greenside	Yes	Wealth Management	25-34
Customer 11	No	Westdene	No		25-34
Customer 12	No	Bedfordview	No		<25
Customer 13	No	Parkmore	Yes	Corporate Landscaping and Maintenance	25-34
Customer 14	No	Centurion	No		25-34
Customer 15	No	Centurion	No		25-34
Customer 16	No	Randburg	Yes	Nestlé House	35-44
Customer 17	No	Lyndhurst	No		<25
Customer 18	Yes	Wilgeheuwel	No		25-34
Customer 19	No	Kyalami	Yes	Conveyancer	45-54
Customer 20	No	Randburg	No		35-44
Customer 21	No	Kempton Park	No		25-34
Customer 22	No	Jhb	No		35-44
Customer 23	No	Jhb	No		25-34
Customer 24	No	Rosherville	No		25-34
Customer 25	No	North Riding	No		25-34
Customer 26	No	Randburg	Yes	Banking	25-34
Customer 27	No	Pretoria	No		25-34
Customer 28	No	Pretoria	No		25-34
Customer 29	No	Douglasdale	No		<25
Customer 30	Yes	Midrand	No		25-34
Customer 31	No	Lonehill	Yes	Civil Engineer	45-54
Customer 32	No	Jhb	No		35-44
Customer 33	No	Bryanston	No		35-44
Customer 34	No	Nottingham Road	No		45-54
Customer 35	No	Honeydew	No		25-34
Customer 36	No	Jhb	No		35-44
Customer 37	No	Northcliff	No		45-54

Customer 38	No	Sandton	Yes	Technology Services	25-34
Customer 39	No	North Riding	Yes	Technical Manager	25-34
Customer 40	No	Parkhurst	Yes	Financial Services	25-34
Customer 41	No	Rewlatch	No		25-34
Customer 42	Yes	Honeydew	No		25-34
Customer 43	No	Randburg	No		35-44
Customer 44	No	Sandton	Yes	Banking	35-44
Customer 45	No	Jhb	No		35-44
Customer 46	No	Bryanston	No		25-34
Customer 47	No	Bryanston	No		45-54
Customer 48	No	Jhb	No		25-34
Customer 49	No	Randburg	Yes	Insurance	35-44
Customer 50	No	Blairgowrie	No		35-44
Customer 51	No	Roodepoort	No		25-34
Customer 52	No	Mulbarton	No		<25
Customer 53	No	Centurion	No		35-44
Customer 54	No	Honeydew	No		25-34
Customer 55	No	Fourways	No		25-34
Customer 56	No	Jhb	No		35-44
Customer 57	No	Bryanston	Yes	Security	25-34
Customer 58	No	Alberton	No		25-34
Customer 59	Yes	Parkhurst	No		35-44
Customer 60	Yes	Jhb	Yes	IT	35-44
Customer 61	Yes	Jhb	Yes	Pilot SAA	35-44
Customer 62	Yes	Edenvale	Yes	Financial	25-34
Customer 63	Yes	Edenvale	Yes	Fleet Africa	35-44

Table F38: Expectation Scores for Customers at Dealership K

DEALERSHIP K																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 2	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	
Customer 3	6	7	7	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 5	7	7	5	5	7	7	7	7	6	6	6	6	6	7	7	7	7	6	6	7	7	
Customer 6	3	4	5	5	3	4	4	5	3	6	6	5	3	4	4	4	6	6	7	4	6	
Customer 7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 8	6	7	6	5	7	6	6	5	6	5	7	7	4	6	6	6	7	7	5	5	7	
Customer 9	5	6	7	6	6	6	6	6	6	6	6	6	7	7	7	7	7	6	6	6	7	
Customer 10	6	6	6	7	7	7	5	6	7	7	7	7	6	5	5	6	6	5	5	5	5	
Customer 11	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	
Customer 12	5	6	6	6	7	7	7	6	7	6	6	6	7	7	7	7	7	6	5	6	6	
Customer 13	4	7	7	7	6	6	7	7	6	7	7	6	7	5	7	7	5	7	7	7	7	
Customer 14	7	7	7	7	7	7	7	7	7	1	7	5	5	7	7	7	7	5	7	4	7	
Customer 15	6	5	7	5	7	7	7	7	7	5	7	7	7	7	7	7	7	6	5	6	5	
Customer 16	5	5	5	4	7	7	7	7	6	7	7	6	7	7	7	5	7	6	5	6	7	
Customer 17	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Customer 18	5	6	6	6	7	6	7	6	5	6	6	6	5	6	5	6	7	6	7	5	6	
Customer 19	5	5	5	4	5	4	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	
Customer 20	6	7	6	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	6	7	7	
Customer 21	4	4	6	5	7	7	7	7	7	7	7	7	6	7	7	7	7	7	6	6	7	
Customer 22	5	5	6	6	5	5	6	6	6	6	6	6	5	6	5	6	6	6	6	6	6	

Customer 23	4	5	5	5	6	7	6	7	7	7	7	7	6	6	6	6	6	7	6	6	6	6
Customer 24	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 27	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	6
Customer 28	3	6	7	6	3	6	7	7	7	7	7	7	6	7	7	7	7	7	6	7	7	7
Customer 29	6	6	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 30	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	7
Customer 31	7	7	7	7	4	7	6	7	7	7	7	7	5	7	6	7	6	6	6	6	6	6
Customer 32	5	5	7	6	5	6	6	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6
Customer 33	2	6	6	6	7	7	7	7	7	6	7	7	7	7	7	7	6	7	6	7	7	7
Customer 34	7	7	6	7	5	5	5	5	6	6	5	6	6	6	6	6	5	6	7	6	5	7
Customer 35	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7
Customer 36	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7
Customer 37	7	7	7	6	7	7	6	7	7	7	7	7	7	7	7	7	7	6	6	7	7	7
Customer 38	6	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	6	7	6	7	6	6
Customer 39	6	6	6	6	7	7	7	7	6	6	7	7	6	6	7	6	7	7	6	7	7	6
Customer 40	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 41	5	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 42	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 43	6	6	7	6	7	7	7	7	7	7	7	7	5	7	7	7	6	6	5	6	6	6
Customer 44	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 45	4	2	5	3	6	6	6	6	4	5	6	6	6	6	6	6	6	6	5	6	6	6
Customer 46	5	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 47	2	5	7	6	7	7	7	7	7	7	7	7	4	7	7	7	7	6	3	7	7	7
Customer 48	5	4	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6	7	6	6
Customer 49	6	7	5	6	6	7	5	5	5	5	6	6	6	6	6	6	7	7	7	7	5	5
Customer 50	5	5	6	3	7	7	6	6	6	5	7	7	6	7	6	7	6	7	7	7	6	7

Customer 51	5	6	6	6	7	6	6	6	6	7	7	5	6	5	6	6	7	7	6	6	6	6
Customer 52	6	7	7	7	7	7	7	7	7	7	7	7	6	7	7	6	7	6	4	7	7	7
Customer 53	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	5	5	6	6	6	7	6	6	6	7	7	7	6	7	7	7	6	7	7	7	7	7
Customer 55	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 56	4	6	4	3	7	7	7	7	6	7	7	7	7	7	7	7	7	7	4	7	7	7
Customer 57	7	6	6	7	7	7	6	7	5	7	5	7	3	7	7	5	5	7	7	6	7	7
Customer 58	6	6	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	7	6	7	7	7
Customer 59	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 60	7	6	6	7	7	7	7	6	7	7	7	7	6	7	6	7	7	6	7	7	7	7
Customer 61	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	5	6	7	6
Customer 62	4	6	6	7	7	6	6	6	5	4	5	5	4	5	6	3	4	5	3	5	5	4
Customer 63	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Table F39: Importance Weighting Scores for Customers at Dealership K

DEALERSHIP K					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	15	30	15	30	10
Customer 2	20	30	30	10	10
Customer 3	20	50	10	10	10
Customer 4	10	30	15	30	15
Customer 5	20	25	20	25	10
Customer 6	30	40	20	5	5
Customer 7	10	60	10	10	10
Customer 8	10	40	20	20	10
Customer 9	20	20	20	20	20
Customer 10	5	10	10	70	5
Customer 11	20	20	30	15	15
Customer 12	10	30	20	20	20
Customer 13	10	60	10	10	10
Customer 14	5	5	30	30	30
Customer 15	10	40	20	20	10
Customer 16	10	40	20	20	10
Customer 17	10	30	10	30	20
Customer 18	10	60	10	10	10
Customer 19	20	20	20	20	20
Customer 20	2.5	80	10	5	2.5
Customer 21	5	60	10	10	15
Customer 22	10	20	40	10	20
Customer 23	10	30	30	20	10
Customer 24	15	30	30	10	15
Customer 25	10	50	10	10	20
Customer 26	10	30	20	20	20
Customer 27	5	60	20	10	5
Customer 28	30	20	20	20	10
Customer 29	18	18	28	18	18
Customer 30	10	10	20	50	10
Customer 31	15	25	25	15	20
Customer 32	5	50	20	20	5
Customer 33	20	30	20	15	15
Customer 34	20	40	15	15	10
Customer 35	5	70	10	10	5
Customer 36	20	30	10	30	10
Customer 37	20	30	15	20	15

Customer 38	10	40	20	20	10
Customer 39	15	25	20	20	20
Customer 40	5	70	10	10	5
Customer 41	10	50	10	20	10
Customer 42	20	50	10	10	10
Customer 43	5	50	20	20	5
Customer 44	10	30	30	20	10
Customer 45	10	10	50	20	10
Customer 46	5	80	5	5	5
Customer 47	2	90	5	2	1
Customer 48	10	60	10	10	10
Customer 49	10	60	10	10	10
Customer 50	10	40	20	20	10
Customer 51	20	20	20	30	10
Customer 52	20	10	20	20	30
Customer 53	5	20	60	10	5
Customer 54	10	35	15	25	15
Customer 55	10	50	10	10	20
Customer 56	0	100	0	0	0
Customer 57	15	15	25	25	20
Customer 58	20	40	20	10	10
Customer 59	2	80	5	10	3
Customer 60	20	25	20	25	10
Customer 61	20	60	5	10	5
Customer 62	50	20	10	10	10
Customer 63	20	20	20	20	20

Table F40: Perception Scores for Customers at Dealership K

DEALERSHIP K																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7
Customer 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 3	7	7	7	7	7	6	6	6	6	6	6	6	5	5	5	6	6	5	5	6	5	5
Customer 4	7	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 5	7	6	6	4	5	6	5	6	5	5	5	5	5	5	6	6	5	5	6	5	6	6
Customer 6	6	7	7	7	6	6	7	7	6	6	6	7	6	5	7	6	7	7	7	6	6	6
Customer 7	5	6	7	5	6	5	6	6	4	6	6	6	2	6	4	7	4	5	5	5	4	4
Customer 8	6	7	7	7	6	6	6	6	6	6	6	6	5	6	5	5	7	7	7	6	7	6
Customer 9	5	7	7	7	7	7	7	7	7	7	7	7	7	6	6	7	6	7	6	7	6	7
Customer 10	6	6	6	5	5	4	4	5	5	7	7	5	5	6	5	7	7	5	6	5	6	5
Customer 11	5	6	5	5	5	6	5	5	4	5	5	5	5	5	5	5	4	5	5	5	5	5
Customer 12	7	6	5	6	6	6	6	6	6	6	6	4	6	5	5	5	6	6	5	5	6	5
Customer 13	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	7	4	7
Customer 14	7	7	7	7	7	7	7	7	7	1	5	7	5	7	7	7	7	7	7	4	5	7
Customer 15	4	6	6	6	3	4	2	2	4	5	4	4	6	5	5	6	5	5	6	5	5	5
Customer 16	5	6	6	5	7	7	6	7	5	7	6	6	6	6	7	7	7	6	5	6	7	6
Customer 17	7	7	7	7	1	1	1	4	4	7	3	1	5	3	4	5	4	1	7	1	1	1
Customer 18	5	5	5	4	5	5	5	5	4	6	5	5	5	5	6	6	5	5	4	5	5	5
Customer 19	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Customer 20	6	7	6	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6	7	7	7
Customer 21	5	7	7	6	6	6	7	7	6	6	7	7	7	6	6	7	7	7	7	7	7	7
Customer 22	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Customer 23	4	6	6	3	6	6	7	6	6	7	7	7	6	6	6	6	6	6	6	6	6	6
Customer 24	5	5	6	5	6	6	5	5	6	6	7	7	6	6	6	7	6	7	6	7	6	6
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	6	6	7	6	7	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	6
Customer 27	6	6	7	6	7	6	7	7	6	6	7	6	6	6	6	7	6	7	5	6	6	6
Customer 28	5	7	7	6	6	6	7	7	6	6	6	7	7	7	7	6	6	7	6	7	7	7
Customer 29	5	5	6	7	5	6	5	5	2	5	5	6	6	5	5	7	5	6	6	6	5	6
Customer 30	6	7	5	6	5	5	6	6	4	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 31	6	6	6	6	4	5	3	4	5	5	4	5	5	5	4	6	5	5	5	4	4	5
Customer 32	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Customer 33	5	6	6	6	6	6	7	7	4	7	7	7	5	6	6	7	6	5	5	6	5	5
Customer 34	6	6	6	6	6	7	6	6	6	6	6	5	6	6	6	6	5	6	5	6	5	5
Customer 35	6	6	6	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Customer 36	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 37	6	7	6	5	6	6	5	5	6	5	6	6	6	7	6	7	6	6	5	6	6	6
Customer 38	5	6	6	7	4	5	2	4	4	6	6	6	6	6	4	6	6	6	6	6	5	6
Customer 39	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	6	7	7	7
Customer 40	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	4	7	7	7
Customer 41	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 42	6	7	7	6	4	7	4	4	4	4	4	4	6	4	4	3	5	4	2	4	5	6
Customer 43	4	6	7	6	6	6	7	6	5	7	7	7	6	7	7	7	6	7	6	6	7	6
Customer 44	6	6	6	6	6	5	5	5	5	5	6	5	5	6	5	6	5	5	5	6	5	5
Customer 45	5	6	6	5	5	6	6	6	6	5	6	6	6	6	6	6	6	6	5	6	6	6
Customer 46	4	5	6	5	5	6	6	6	5	6	5	6	6	6	6	7	6	6	5	6	6	6
Customer 47	4	7	7	4	6	7	6	6	4	7	7	7	6	7	7	7	7	7	5	6	6	6
Customer 48	5	6	6	6	6	6	7	7	7	6	6	6	6	6	6	6	6	7	5	6	7	7
Customer 49	7	7	6	6	6	6	6	6	5	6	7	7	6	6	6	7	7	7	7	7	6	6

Customer 50	7	7	6	5	5	5	5	6	5	6	6	5	6	6	6	6	6	5	7	7	6	5
Customer 51	7	6	6	6	6	7	7	6	6	6	6	6	5	6	6	5	7	6	6	6	5	4
Customer 52	5	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 53	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 54	6	6	7	6	6	6	6	6	7	7	6	6	6	7	6	7	7	7	6	7	6	6
Customer 55	6	6	7	5	6	7	7	7	7	5	7	7	7	7	7	7	6	7	5	6	7	7
Customer 56	4	5	5	5	7	7	7	7	4	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 57	7	7	5	6	7	6	7	7	7	7	6	5	4	5	6	7	7	5	7	7	6	7
Customer 58	6	6	6	6	7	7	6	7	6	7	7	7	7	7	7	7	7	7	6	7	7	6
Customer 59	6	6	7	5	6	6	7	7	7	7	6	6	7	6	7	7	6	7	6	6	6	6
Customer 60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F41: Personal Details for Customers at Dealership L

DEALERSHIP L					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Sandton	No		45-54
Customer 2	No	Edenvale	No		35-44
Customer 3	No	Kensington	No		45-54
Customer 4	No	Sunninghill	No		25-34
Customer 5	No	Kensington	Yes	Architect	>55
Customer 6	No	Edenvale	No		45-54
Customer 7	No	Spruitview	No		25-34
Customer 8	No	Kempton Park	No		45-54
Customer 9	No	Jhb	No		>55
Customer 10	No	Edenvale	No		35-44
Customer 11	No	Jhb	Yes		<25
Customer 12	No	Klerksdorp	No		25-34
Customer 13	No	Bedfordview	No		45-54
Customer 14	No	Glenvista	Yes		>55
Customer 15	No	Greenstone Hill	Yes	Consulting	35-44
Customer 16	No	Soweto	No		25-34
Customer 17	No	Honeydew	Yes	Retail	25-34
Customer 18	No	Modderfontein	Yes	Printing	>55
Customer 19	No	Bedfordview	Yes	Accounting and Auditing	35-44
Customer 20	No	Roodepoort	No		25-34
Customer 21	No	Pretoria	No		45-54
Customer 22	Yes	Bromhof	Yes	Lighting Engineering	35-44

Table F42: Expectation Scores for Customers at Dealership L

DEALERSHIP L																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	5	5	7	2	6	5	6	6	5	6	4	5	4	5	6	6	4	6	6	4	6	6
Customer 2	1	3	3	4	3	4	5	4	4	5	5	6	4	6	5	6	6	5	1	4	5	3
Customer 3	6	6	6	4	7	7	7	6	6	6	6	6	5	6	6	5	6	5	5	6	5	5
Customer 4	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6
Customer 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 6	7	7	6	6	7	7	7	7	6	6	7	7	7	7	7	7	7	6	6	6	7	7
Customer 7	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 9	4	6	6	4	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7
Customer 10	5	5	6	5	7	7	7	6	7	7	7	7	6	6	5	5	7	6	6	6	7	7
Customer 11	7	6	5	6	6	6	5	6	5	7	6	5	5	6	7	7	6	5	6	4	7	6
Customer 12	6	7	6	6	7	7	7	5	7	7	7	7	4	6	7	6	6	7	7	7	7	6
Customer 13	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7
Customer 14	6	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7	7	6	7	7	7	7
Customer 15	6	6	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 16	5	6	7	6	7	5	6	7	5	7	6	7	7	7	7	7	7	7	6	5	7	7
Customer 17	5	5	5	5	6	7	7	7	7	6	7	7	6	7	7	7	6	7	6	6	7	7
Customer 18	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 20	6	6	6	6	5	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6
Customer 21	6	5	7	6	6	7	6	6	7	6	7	6	6	6	6	7	5	6	6	6	6	7
Customer 22	5	4	3	5	2	7	7	6	7	5	4	7	7	7	5	7	7	7	7	6	6	5

Table F43: Importance Weighting Scores for Customers at Dealership L

DEALERSHIP L					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	5	80	5	5	5
Customer 2	10	40	15	15	20
Customer 3	10	50	15	15	10
Customer 4	10	40	20	20	10
Customer 5	20	20	20	20	20
Customer 6	30	40	20	5	5
Customer 7	20	20	20	20	20
Customer 8	25	25	25	10	15
Customer 9	10	10	50	10	20
Customer 10	15	30	20	25	10
Customer 11	15	20	20	15	30
Customer 12	5	50	15	20	10
Customer 13	5	70	5	10	10
Customer 14	10	40	20	10	20
Customer 15	5	50	15	20	10
Customer 16	20	15	20	30	15
Customer 17	10	60	10	10	10
Customer 18	20	20	20	20	20
Customer 19	5	15	20	30	30
Customer 20	5	70	10	5	10
Customer 21	15	20	15	35	15
Customer 22	15	30	20	20	15

Table F44: Perception Scores for Customers at Dealership L

DEALERSHIP L																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	5	5	6	4	6	5	6	6	6	6	6	7	7	6	7	7	6	6	6	5	7	7
Customer 2	5	3	4	1	4	4	3	4	3	1	3	4	4	5	4	4	1	4	1	4	4	5
Customer 3	5	5	5	5	4	5	3	5	5	5	5	5	4	4	5	4	5	5	6	5	5	5
Customer 4	6	6	7	7	5	6	6	6	4	5	6	6	7	5	5	6	6	6	5	6	6	6
Customer 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 6	6	6	7	6	7	7	6	7	6	4	6	7	7	7	6	7	7	6	4	6	6	6
Customer 7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 8	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 9	5	6	6	4	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 10	4	4	6	5	5	6	5	6	6	6	5	6	5	6	5	6	6	6	4	5	5	6
Customer 11	7	6	7	6	7	7	6	6	7	5	6	7	6	7	6	6	7	6	7	7	6	7
Customer 12	5	6	6	6	6	6	7	7	5	7	6	6	5	6	6	7	7	6	6	5	5	5
Customer 13	5	6	7	7	7	7	6	6	6	6	7	7	7	7	7	7	7	6	6	6	6	6
Customer 14	7	6	7	5	6	7	7	7	6	7	7	7	6	6	6	7	6	6	6	7	6	6
Customer 15	4	5	6	6	4	5	5	5	4	5	5	6	4	4	6	5	5	6	3	6	6	5
Customer 16	7	6	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	7	4	7	7	6
Customer 17	6	6	6	6	6	6	7	6	6	5	6	6	4	5	6	5	5	5	5	5	5	5
Customer 18	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 19	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	5	6	6	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	4	6	5	5
Customer 21	6	6	7	6	6	7	6	6	6	6	6	6	6	6	5	6	6	7	5	6	6	6
Customer 22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table F45: Personal Details for Customers at Dealership M

DEALERSHIP M					
Personal Details					
Customer	First Visit	Place of Residence	Service Industry (Y/N)	Industry Specified	Age Group
Customer 1	No	Centurion	Yes	Medical	<25
Customer 2	No	Centurion	No		25-34
Customer 3	No	Midrand	Yes	IT	25-34
Customer 4	No	Centurion	No		35-44
Customer 5	No	Centurion	No		35-44
Customer 6	No	Pretoria East	No		25-34
Customer 7	No	Centurion	No		>55
Customer 8	No	Randburg	Yes	Eskom	>55
Customer 9	No	Pretoria East	No		25-34
Customer 10	No	Midrand	No		35-44
Customer 11	No	Centurion	No		45-54
Customer 12	No	Centurion	No		35-44
Customer 13	Yes	Centurion	No		<25
Customer 14	No	Centurion	Yes	Interior Decorating	35-44
Customer 15	No	Pretoria	Yes	IT	25-34
Customer 16	No	Pretoria West	No		35-44
Customer 17	No	Centurion	No		45-54
Customer 18	No	Centurion	No		25-34
Customer 19	No	Pretoria	No		25-34
Customer 20	No	Centurion	No		25-34
Customer 21	No	Montana Park	No		35-44
Customer 22	Yes	Pietermaritzburg, KZN	No		45-54
Customer 23	Yes	Orchards	No		25-34
Customer 24	No	Warmbaths	Yes	Eskom	35-44
Customer 25	No	Villiers, Freestate	No		45-54
Customer 26	No	Centurion	No		25-34
Customer 27	No	Highveld Park	No		35-44
Customer 28	No	Bronkhorstspuit	No		45-54
Customer 29	No	Midrand	Yes	BCX Operations	35-44
Customer 30	No	Laudium	No		35-44
Customer 31	No	Centurion	Yes	Mercedes Benz	25-34
Customer 32	No	Centurion	No		25-34
Customer 33	No	Fourways, JHB	Yes	Sales Manager	<25
Customer 34	Yes	Pretoria	No		25-34
Customer 35	Yes	Clubview	No		45-54
Customer 36	Yes	Centurion	No		35-44

Table F46: Expectation Scores for Customers at Dealership M

DEALERSHIP M																						
Expectation Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Customer 1	4	5	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	6	7	6	7	7
Customer 2	4	5	5	6	5	6	4	4	2	3	4	6	2	3	5	4	5	6	5	5	4	5
Customer 3	7	6	7	7	7	7	6	7	7	6	7	7	7	7	7	7	6	7	7	7	7	7
Customer 4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 5	5	6	7	7	6	7	7	7	7	6	6	7	6	7	7	6	6	6	6	6	7	6
Customer 6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 7	7	5	7	6	5	6	7	7	7	7	7	7	7	7	6	6	7	6	6	6	6	6
Customer 8	5	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Customer 9	5	5	5	6	3	5	5	4	5	4	6	6	6	6	5	6	5	6	5	6	6	5
Customer 10	6	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	7	7	7	7	7	5
Customer 11	4	5	6	5	6	6	7	7	6	5	6	6	6	6	6	7	7	6	6	6	6	7
Customer 12	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	6	7	7	7
Customer 13	6	7	5	6	7	7	6	7	5	6	7	7	5	7	7	6	7	7	6	6	7	7
Customer 14	5	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 15	4	6	7	6	7	6	7	7	5	7	7	7	5	7	7	5	6	5	5	6	6	6
Customer 16	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 17	7	7	7	5	7	7	7	6	7	6	7	7	7	7	7	7	6	6	7	7	7	7
Customer 18	5	6	6	5	6	6	6	6	6	7	6	5	6	6	6	6	6	6	4	5	6	5
Customer 19	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 20	7	7	7	7	7	7	7	7	7	4	7	7	5	7	7	7	7	7	7	7	7	7
Customer 21	7	7	6	5	6	5	7	7	6	6	6	7	6	5	6	6	7	7	7	7	6	7
Customer 22	5	5	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7

Customer 23	7	7	6	6	7	7	7	7	7	7	7	7	7	6	6	7	7	6	7	6	7	6
Customer 24	6	6	6	6	7	7	6	7	7	7	6	7	6	7	6	7	6	6	6	6	6	6
Customer 25	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	7	7	7	7	5	7	7	6	7	6	7	7	7	6	7	7	6	7	5	7	5	5
Customer 27	5	6	6	6	7	7	7	7	6	5	7	7	7	7	7	7	7	7	7	7	7	7
Customer 28	4	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	7	6	7
Customer 29	6	7	6	7	2	3	5	4	5	6	3	6	4	5	3	5	6	6	2	3	3	3
Customer 30	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 31	5	6	6	6	5	7	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6
Customer 32	5	6	5	6	6	7	6	6	6	7	7	6	6	6	6	7	7	7	5	7	7	7
Customer 33	7	7	7	7	7	7	7	7	5	6	7	7	7	7	7	7	5	7	7	4	7	7
Customer 34	6	7	7	6	7	7	7	7	7	7	7	7	7	6	6	7	7	6	6	6	7	7
Customer 35	3	7	7	3	7	7	7	7	3	3	7	7	4	7	7	7	6	5	4	5	7	5
Customer 36	7	7	7	7	7	7	7	7	5	7	6	6	7	7	6	7	5	7	5	6	5	6

Table F47: Importance Weighting Scores for Customers at Dealership M

DEALERSHIP M					
Importance Weightings					
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Customer 1	25	15	50	5	5
Customer 2	20	10	20	30	20
Customer 3	10	30	20	20	20
Customer 4	18	18	18	21	25
Customer 5	10	25	25	20	20
Customer 6	4	20	20	40	16
Customer 7	18	18	20	20	24
Customer 8	10	40	15	15	20
Customer 9	20	50	20	5	5
Customer 10	5	60	20	10	5
Customer 11	10	40	25	15	10
Customer 12	10	20	50	10	10
Customer 13	10	10	20	50	10
Customer 14	15	35	20	20	10
Customer 15	10	30	20	20	20
Customer 16	20	50	15	10	5
Customer 17	10	35	25	20	10
Customer 18	15	20	25	20	20
Customer 19	10	10	50	20	10
Customer 20	20	30	15	20	15
Customer 21	10	60	10	10	10
Customer 22	20	20	25	20	15
Customer 23	10	60	10	10	10
Customer 24	20	20	20	20	20
Customer 25	10	50	15	15	10
Customer 26	30	10	10	30	20
Customer 27	10	40	10	30	10
Customer 28	10	40	20	20	10
Customer 29	25	15	20	15	25
Customer 30	10	70	10	5	5
Customer 31	5	50	10	25	10
Customer 32	10	20	30	20	20
Customer 33	10	25	25	25	15
Customer 34	5	50	30	10	5
Customer 35	15	25	25	20	15
Customer 36	20	30	20	20	10

Table F48: Perception Scores for Customers at Dealership M

DEALERSHIP M																						
Perception Measurement																						
Customer	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Customer 1	7	6	7	7	6	7	7	6	7	6	6	7	6	6	7	6	7	6	6	6	7	7
Customer 2	4	5	6	3	3	4	2	2	1	2	3	4	2	3	4	5	3	5	4	3	6	3
Customer 3	4	6	6	6	4	5	5	4	6	6	6	4	4	5	5	5	6	6	7	6	5	5
Customer 4	6	6	6	6	7	7	7	7	7	7	5	7	6	7	7	7	7	7	6	7	7	7
Customer 5	5	6	6	5	6	6	6	6	6	6	6	6	6	6	7	6	6	6	6	6	6	6
Customer 6	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Customer 7	7	6	7	7	6	6	7	7	7	7	6	7	6	7	7	7	7	7	7	7	7	7
Customer 8	5	6	6	6	5	6	6	5	6	5	6	5	5	6	6	6	6	6	6	6	6	6
Customer 9	6	5	6	5	5	5	6	5	6	6	5	5	6	5	5	5	6	6	5	5	5	6
Customer 10	6	6	5	2	6	6	6	7	7	6	6	5	4	6	6	6	5	6	6	6	6	6
Customer 11	6	7	7	5	5	5	5	6	5	7	7	7	6	6	6	6	7	6	6	6	6	6
Customer 12	6	6	6	6	6	6	5	6	6	7	6	6	6	5	6	6	6	6	6	6	6	6
Customer 13	5	6	6	4	7	5	6	6	4	5	3	5	5	5	5	4	6	6	6	6	6	5
Customer 14	5	7	7	6	6	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6
Customer 15	6	7	7	5	7	7	7	7	4	7	7	7	6	7	7	7	6	6	6	7	6	7
Customer 16	6	6	6	6	7	6	7	6	6	5	6	4	6	5	5	5	6	6	7	6	5	6
Customer 17	6	6	6	4	6	6	6	6	6	7	7	6	6	6	6	5	5	6	6	6	6	6
Customer 18	4	6	6	5	6	5	6	6	6	6	6	5	5	6	6	5	5	6	4	5	6	5
Customer 19	6	6	7	7	5	7	6	5	6	6	7	7	7	7	7	7	7	6	7	6	7	7
Customer 20	6	7	6	6	7	7	6	7	7	2	7	7	5	6	6	7	7	6	6	6	7	7
Customer 21	6	6	6	5	7	5	4	6	5	6	5	5	5	5	5	5	5	6	4	5	5	6
Customer 22	5	7	7	4	5	4	7	5	4	4	4	4	4	5	5	4	4	5	7	5	5	5

Customer 23	5	6	6	6	6	6	6	6	6	5	6	6	5	6	6	6	6	6	6	6	5	6
Customer 24	7	7	6	6	7	7	6	7	7	7	6	7	6	6	6	7	6	6	7	6	7	7
Customer 25	7	7	7	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7
Customer 26	7	7	7	7	7	6	7	7	6	7	7	7	7	7	7	7	6	5	7	5	5	6
Customer 27	5	6	6	6	7	6	6	6	6	7	7	7	7	6	6	6	7	6	6	6	6	7
Customer 28	7	7	7	7	7	7	5	7	5	7	6	7	6	6	7	7	6	7	7	6	6	6
Customer 29	5	5	6	5	3	6	4	3	4	5	5	3	3	3	4	4	3	4	3	4	3	4
Customer 30	5	6	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5
Customer 31	5	5	6	6	5	6	4	5	6	5	5	5	5	5	5	5	5	5	5	5	5	5
Customer 32	5	5	5	6	6	6	6	6	6	6	6	7	6	6	6	6	7	6	5	6	7	7
Customer 33	5	5	5	5	5	6	6	5	5	5	7	7	7	6	6	7	6	7	7	6	7	7
Customer 34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

9.7 Appendix G – Dealership Employee Data

In the following Appendix all the data collected from the Employees at the various dealerships, is included. This data contains the Employees' Personal Details, Employees' Expectations Score, Employees' Importance Weighting Scores and Employees' Perceptions Scores. Each Table indicates the Dealership whose data is being displayed. Tables for Dealership A also contain the column numbering assigned to each of the four types of data tables for each Dealership. This numbering is used when referring to a data set in Chapter 5.

Table G1: Personal Details for Employees at Dealership A

DEALERSHIP A			
Personal Details			
Column 1	Column 2	Column 1	Column 2
Employee	Age Group	Employee	Age Group
Employee 1	-	Employee 5	-
Employee 2	-	Employee 6	-
Employee 3	-	Employee 7	-
Employee 4	-	Employee 8	-

NOTE: Table G1 has no data as the employees did not fill out the first section of the survey. The Table was used to complete the Table set for Dealership A.

Table G2: Importance Weighting Scores for Employees at Dealership A

DEALERSHIP A					
Importance Weighting					
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	20	40	10	10	20
Employee 3	40	30	10	10	10
Employee 4	15	20	30	15	20
Employee 5	20	30	10	20	20
Employee 6	20	20	20	20	20
Employee 7	10	40	20	15	15
Employee 8	10	50	5	20	15

Table G3: Expectation Scores for Employees at Dealership A

DEALERSHIP A																						
Expectation Measurement																						
	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14	Col. 15	Col. 16	Col. 17	Col. 18	Col. 19	Col. 20	Col. 21	Col. 22	Col. 23
Employee	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	6	6	7	6	5	7	6	6	6	6	6	6	6	6	6	6	6	6	3	5	6	6
Employee 2	4	4	6	4	5	6	7	6	6	6	6	6	6	7	7	7	7	6	7	6	6	6
Employee 3	7	6	6	7	7	7	6	7	7	7	6	7	7	7	7	6	7	7	7	7	6	7
Employee 4	1	5	7	7	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7	6	7	7
Employee 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 6	7	5	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	4	7	7	7	7	6	7	7	6	6	4	7	4	7	4	6	7	7	4	7	7	7

Table G4: Perception Scores for Employees at Dealership A

DEALERSHIP A																						
Perception Measurement																						
	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9	Col. 10	Col. 11	Col. 12	Col. 13	Col. 14	Col. 15	Col. 16	Col. 17	Col. 18	Col. 19	Col. 20	Col. 21	Col. 22	Col. 23
Employee	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	4	2	7	5	6	7	6	6	6	5	6	7	6	6	5	7	7	6	6	7	7	6
Employee 2	3	4	5	4	5	6	4	5	6	4	6	6	4	4	4	6	6	7	4	6	7	7
Employee 3	5	6	7	7	6	7	7	7	6	6	7	7	7	7	6	6	7	7	6	7	7	7
Employee 4	4	4	1	4	2	6	6	6	6	6	6	7	6	7	7	6	6	5	6	6	6	7
Employee 5	7	7	6	7	6	7	6	7	7	6	6	7	6	6	6	6	6	6	7	6	6	6
Employee 6	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	4	4	6	7	6	7	7	5	7	6	6	6	4	7	6	7	7	6	4	7	7	7

Table G5: Personal Details for Employees at Dealership B

DEALERSHIP B	
Personal Details	
Employee	Age Group
Employee 1	35-44
Employee 2	<25
Employee 3	25-34
Employee 4	45-54
Employee 5	45-54
Employee 6	35-44
Employee 7	35-44
Employee 8	
Employee 9	45-54
Employee 10	35-44
Employee 11	>55
Employee 12	35-44
Employee 13	<25

Table G6: Importance Weighting Scores for Employees at Dealership B

DEALERSHIP B					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	40	20	5	5	30
Employee 3	10	20	40	20	10
Employee 4	35	15	20	15	15
Employee 5	20	20	20	20	20
Employee 6	20	20	20	20	20
Employee 7	20	10	20	30	20
Employee 8	10	20	30	20	20
Employee 9	10	25	25	20	20
Employee 10	20	20	20	20	20
Employee 11	20	20	20	20	20
Employee 12	20	50	10	10	10
Employee 13	30	30	20	10	10

Table G7: Expectation Scores for Employees at Dealership B

DEALERSHIP B																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	7	7	7	7	7	7	7	7	5	5	7	7	7	7	7	7	7	7	7	7	7	
Employee 2	4	4	7	4	4	4	4	6	7	4	4	7	1	4	7	7	7	4	1	4	7	4
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	4	7	7	7
Employee 4	6	5	6	7	4	4	4	4	4	6	5	6	5	5	6	5	6	6	6	5	5	6
Employee 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 6	7	7	7	7	7	7	7	7	7	3	7	7	7	7	7	7	4	7	7	7	7	7
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	4	7	7	7
Employee 9	6	5	6	6	5	6	6	7	7	4	6	7	7	7	7	7	7	7	6	7	7	7
Employee 10	6	7	6	7	6	7	7	6	7	7	7	7	7	6	7	6	7	7	7	6	7	7
Employee 11	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Employee 12	7	7	7	7	5	6	7	7	4	6	6	6	4	6	7	6	6	6	5	6	7	6
Employee 13	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7

Table G8: Perception Scores for Employees at Dealership B

DEALERSHIP B																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	7	7	7	7	6	7	6	6	7	4	7	7	7	7	4	7	7	7	7	7	7	7
Employee 2	4	4	7	7	4	4	4	4	4	4	4	5	4	5	5	5	1	4	7	4	5	4
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	6	6	6	5	4	5	4	4	5	6	5	5	5	5	5	5	4	5	6	5	4	5
Employee 5	5	6	5	6	4	4	3	3	6	6	6	5	5	4	7	6	5	5	6	6	7	6
Employee 6	7	7	7	7	5	7	5	5	4	4	7	7	7	7	7	7	4	7	7	7	7	7
Employee 7	4	5	6	5	4	5	5	5	5	4	6	7	5	5	6	7	5	5	7	5	5	5
Employee 8	4	5	7	6	5	6	6	6	7	5	6	6	6	6	6	7	5	7	7	7	7	6
Employee 9	7	7	7	6	6	7	5	6	6	6	5	6	6	6	6	7	7	6	6	6	7	7
Employee 10	6	6	7	7	5	6	6	6	7	7	6	7	6	6	7	7	7	7	7	7	6	7
Employee 11	6	6	4	5	3	4	3	4	5	5	4	4	4	4	5	4	3	3	6	6	4	4
Employee 12	7	7	7	7	5	6	4	4	5	7	6	7	5	6	6	6	6	6	6	7	7	6
Employee 13	6	5	4	7	4	4	5	5	5	5	4	4	4	5	6	5	5	5	6	5	4	6

Table G9: Personal Details for Employees at Dealership D

DEALERSHIP D	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	35-44
Employee 3	25-34
Employee 4	25-34
Employee 5	<25
Employee 6	35-44
Employee 7	25-34
Employee 8	35-44

Table G10: Importance Weighting Scores for Employees at Dealership D

DEALERSHIP D					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	20	25	25	10	20
Employee 3	20	20	20	20	20
Employee 4	20	20	20	20	20
Employee 5	20	20	20	20	20
Employee 6	20	20	20	20	20
Employee 7	20	20	20	20	20
Employee 8	20	20	20	20	20

Table G11: Expectation Scores for Employees at Dealership D

DEALERSHIP D																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 2	6	6	7	5	1	4	5	6	5	5	5	5	5	6	5	6	6	5	5	4	5	6
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7

Table G12: Perception Scores for Employees at Dealership D

DEALERSHIP D																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	7	7	7	7	7	7	5	5	7	5	4	4	5	5	5	5	5	4	5	5	5	5
Employee 2	5	5	5	6	5	2	4	5	5	6	4	6	5	5	5	4	5	5	5	5	5	5
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	5	5	5	6	3	5	5	5	5	6	6	6	5	4	5	5	5	6	5	7	6	6
Employee 5	5	5	7	6	6	6	5	6	6	7	6	6	5	5	6	6	6	6	5	7	6	6
Employee 6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	5	3	7	6	6	7	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	6

Table G13: Personal Details for Employees at Dealership E

DEALERSHIP E	
Personal Details	
Employee	Age Group
Employee 1	35-44
Employee 2	35-44
Employee 3	<25

Table G14: Importance Weighting Scores for Employees at Dealership E

DEALERSHIP E					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	50	20	10	10	10
Employee 2	20	5	65	5	5
Employee 3	20	40	20	10	10

Table G15: Expectation Scores for Employees at Dealership E

DEALERSHIP E																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	6	6	7	6	7	7	7	6	6	6	7	7	7	7	7	7	7	7	5	7	7	7
Employee 2	6	6	7	7	6	7	7	7	7	7	7	7	6	6	7	7	6	7	7	7	6	5
Employee 3	7	7	7	7	6	7	7	7	6	7	7	7	7	7	7	7	7	7	7	6	7	7

Table G16: Perception Scores for Employees at Dealership E

DEALERSHIP E																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	6	6	7	6	7	7	6	6	5	6	7	7	7	7	7	7	7	7	6	7	7	7
Employee 2	5	6	5	7	7	7	7	6	7	5	7	7	7	6	7	7	7	6	5	6	6	7
Employee 3	7	7	7	6	7	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7

Table G17: Personal Details for Employees at Dealership F

DEALERSHIP F	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	<25
Employee 3	>55
Employee 4	25-34
Employee 5	<25
Employee 6	45-54
Employee 7	45-54

Table G18: Importance Weighting Scores for Employees at Dealership F

DEALERSHIP F					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	10	20	40	15	15
Employee 2	20	20	30	20	10
Employee 3	20	20	20	20	20
Employee 4	10	30	20	20	20
Employee 5	20	20	20	20	20
Employee 6	20	20	20	10	30
Employee 7	30	20	30	10	10

Table G19: Expectation Scores for Employees at Dealership F

DEALERSHIP F																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	5	5	7	7	7	7	5	7	7	5	6	7	7	7	7	7	6	7	5	7	7	6
Employee 2	5	6	6	6	5	6	5	6	6	7	7	7	6	6	7	7	6	6	7	6	6	7
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	7	7	7	6	5	6	6	6	7	7	7	6	7	7	7	7	7	7	1	7	7	7
Employee 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 7	7	7	7	7	6	6	6	6	6	7	7	7	6	7	6	7	6	7	7	7	7	6

Table G20: Perception Scores for Employees at Dealership F

DEALERSHIP F																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	6	6	5	4	4	4	3	5	2	3	3	3	3	4	4	4	5	5	6	5	4	4
Employee 2	7	6	6	6	6	6	6	7	6	7	6	7	6	6	6	6	6	6	7	6	7	6
Employee 3	7	7	7	7	6	7	6	6	7	6	7	7	7	7	6	7	7	7	7	7	7	7
Employee 4	6	6	6	6	4	7	5	4	4	7	4	7	7	5	7	6	5	7	7	7	7	5
Employee 5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 6	6	6	7	6	6	7	6	7	7	7	7	6	6	6	7	7	5	7	7	7	7	7
Employee 7	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

Table G21: Personal Details for Employees at Dealership G

DEALERSHIP G	
Personal Details	
Employee	Age Group
Employee 1	45-54
Employee 2	<25
Employee 3	25-34
Employee 4	45-54
Employee 5	45-54

Table G22: Importance Weighting Scores for Employees at Dealership G

DEALERSHIP G					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	20	20	20	20	20
Employee 3	20	20	20	20	20
Employee 4	20	20	20	20	20
Employee 5	21	21	21	16	21

Table G23: Expectation Scores for Employees at Dealership G

DEALERSHIP G																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 3	6	7	7	7	6	6	6	6	6	6	7	7	5	6	7	7	7	7	1	7	7	7
Employee 4	7	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 5	6	7	7	7	7	7	7	7	7	6	7	7	7	5	7	6	6	7	7	7	7	7

Table G24: Perception Scores for Employees at Dealership G

DEALERSHIP G																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Employee 2	6	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7
Employee 3	7	7	7	7	6	7	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 5	7	7	7	7	7	7	7	7	7	6	6	7	7	5	7	7	7	7	7	6	7	7

Table G25: Personal Details for Employees at Dealership H

DEALERSHIP H	
Personal Details	
Employee	Age Group
Employee 1	<25
Employee 2	25-34
Employee 3	35-44

Table G26: Importance Weighting Scores for Employees at Dealership H

DEALERSHIP H					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	10	30
Employee 2	33	13	17	20	17
Employee 3	20	20	20	20	20

Table G27: Expectation Scores for Employees at Dealership H

DEALERSHIP H																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	4	7	7	6	5	7	7	6	7	7	6	7	6	7	7	7	6	7	7	7	7	7
Employee 2	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 3	7	7	6	6	7	7	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7

Table G28: Perception Scores for Employees at Dealership H

DEALERSHIP H																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	4	4	6	4	6	7	7	6	7	4	4	7	5	4	5	7	4	7	7	7	6	7
Employee 2	4	6	5	4	5	6	6	6	7	7	6	6	6	6	6	6	6	7	7	6	6	6
Employee 3	5	5	7	5	7	7	7	7	7	7	7	6	6	6	6	6	6	6	7	7	7	6

Table G29: Personal Details for Employees at Dealership I

DEALERSHIP I	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	35-44
Employee 3	25-34
Employee 4	<25
Employee 5	45-54

Table G30: Importance Weighting Scores for Employees at Dealership I

DEALERSHIP I					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	10	30	30	15	15
Employee 2	20	20	20	20	20
Employee 3	20	20	20	20	20
Employee 4	20	20	20	20	20
Employee 5	20	20	20	20	20

Table G31: Expectation Scores for Employees at Dealership I

DEALERSHIP I																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 2	5	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7
Employee 4	7	7	7	4	7	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7	7	7
Employee 5	7	7	7	7	7	7	7	7	6	6	7	7	6	7	7	7	7	7	6	7	7	7

Table G32: Perception Scores for Employees at Dealership I

DEALERSHIP I																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	6	6	6	7	6	6	6	6	5	5	6	6	6	6	7	7	6	7	7	7	6	5
Employee 2	6	6	6	6	7	7	6	6	6	6	6	7	7	7	7	7	7	7	6	7	7	7
Employee 3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7
Employee 4	7	4	7	4	6	7	4	7	7	7	7	7	4	7	7	7	7	7	7	7	7	7
Employee 5	6	6	6	6	6	6	6	6	5	7	6	6	6	5	5	6	4	6	6	7	7	5

Table G33: Personal Details for Employees at Dealership J

DEALERSHIP J	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	25-34
Employee 3	35-44
Employee 4	25-34
Employee 5	25-34
Employee 6	<25
Employee 7	<25

Table G34: Importance Weighting Scores for Employees at Dealership J

DEALERSHIP J					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	20	20	20	20	20
Employee 2	50	25	50	0	25
Employee 3	20	30	25	10	15
Employee 4	10	50	20	10	10
Employee 5	20	20	20	20	20
Employee 6	10	50	10	20	10
Employee 7	20	20	20	20	20

Table G35: Expectation Scores for Employees at Dealership J

DEALERSHIP J																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	6	6	6	6	5	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	6	
Employee 2	7	7	7	5	7	7	7	7	7	5	7	7	7	7	7	7	7	7	7	5	7	7
Employee 3	4	3	5	3	6	5	7	7	6	6	7	7	6	7	7	6	6	7	6	6	7	6
Employee 4	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 5	5	7	7	6	5	6	6	6	7	6	6	6	6	6	6	6	6	6	6	6	6	6
Employee 6	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4
Employee 7	5	6	7	5	6	7	7	6	5	6	7	7	7	7	6	7	6	7	6	6	7	7

Table G36: Perception Scores for Employees at Dealership J

DEALERSHIP J																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Employee 2	7	7	6	6	6	7	6	6	7	7	7	7	6	7	7	7	7	6	7	6	7	7
Employee 3	7	6	6	7	6	7	6	7	6	7	6	7	1	6	7	7	7	7	7	7	7	7
Employee 4	7	7	6	6	6	7	5	6	6	6	6	6	6	6	7	6	6	6	7	7	7	7
Employee 5	5	7	6	4	5	5	5	5	7	6	6	6	6	6	6	6	6	6	6	6	6	6
Employee 6	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	5	5	5
Employee 7	5	6	7	6	6	7	7	7	6	7	7	7	7	7	7	6	7	7	6	7	7	7

Table G37: Personal Details for Employees at Dealership K

DEALERSHIP K	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	25-34
Employee 3	25-34
Employee 4	35-44
Employee 5	25-34
Employee 6	25-34
Employee 7	25-34
Employee 8	<25
Employee 9	35-44

Table G38: Importance Weighting Scores for Employees at Dealership K

DEALERSHIP K					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	10	20	40	15	15
Employee 2	30	20	30	10	10
Employee 3	20	20	20	20	20
Employee 4	15	25	20	25	15
Employee 5	20	20	20	20	20
Employee 6	5	20	50	10	15
Employee 7	20	20	20	20	20
Employee 8	20	20	20	20	20
Employee 9	5	70	10	10	5

Table G39: Expectation Scores for Employees at Dealership K

DEALERSHIP K																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	3	6	6	5	6	6	6	6	6	7	6	7	7	7	7	7	7	6	5	7	7	7
Employee 2	6	7	7	7	7	7	7	7	7	7	7	5	7	7	7	7	7	7	4	7	7	7
Employee 3	1	4	7	7	7	7	4	7	7	7	6	7	7	7	7	5	7	6	1	7	7	7
Employee 4	6	6	7	6	5	5	6	6	5	6	6	6	5	7	7	6	6	6	5	6	6	6
Employee 5	6	5	5	6	4	6	6	5	6	6	6	6	5	5	6	6	6	7	7	7	6	6
Employee 6	5	7	7	7	7	7	7	7	6	7	6	7	6	7	7	5	3	7	7	6	5	5
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	7	7	7	7	7	7	6	7	5	7	7	7	7	5	7	7	7	7	7	7	7	7
Employee 9	5	6	6	5	7	7	7	7	7	7	7	7	7	7	7	7	6	7	4	7	7	7

Table G40: Perception Scores for Employees at Dealership K

DEALERSHIP K																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	4	3	4	4	5	4	5	6	5	7	6	6	6	7	6	5	6	5	6	5	5	6
Employee 2	7	7	6	7	4	6	6	6	6	7	7	6	2	5	7	6	7	7	7	7	7	7
Employee 3	7	4	5	5	6	6	7	7	7	7	7	7	5	7	7	7	7	7	6	7	7	6
Employee 4	3	5	6	5	5	5	5	5	6	5	5	5	5	5	6	6	6	6	6	6	6	6
Employee 5	6	5	4	5	6	6	5	6	6	7	5	5	5	5	5	6	6	6	6	6	6	7
Employee 6	5	6	7	7	6	7	6	7	6	7	7	7	7	7	6	6	6	5	7	6	6	6
Employee 7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	7	7	7
Employee 9	7	6	5	5	6	6	6	6	5	5	7	6	3	6	6	6	5	6	5	6	7	6

Table G41: Personal Details for Employees at Dealership L

DEALERSHIP L	
Personal Details	
Employee	Age Group
Employee 1	25-34
Employee 2	25-34
Employee 3	25-34
Employee 4	25-34
Employee 5	<25

Table G42: Importance Weighting Scores for Employees at Dealership L

DEALERSHIP L					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	10	20	20	30	20
Employee 2	20	20	20	20	20
Employee 3	20	20	20	20	20
Employee 4	18	20	20	21	21
Employee 5	30	30	10	10	20

Table G43: Expectation Scores for Employees at Dealership L

DEALERSHIP L																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	5	6	6	6	7	7	5	6	5	6	6	6	6	7	7	7	7	6	6	6	7	7
Employee 2	7	7	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 3	7	7	7	7	7	6	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	6
Employee 4	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7	6	7	7	7
Employee 5	7	6	7	7	7	7	7	7	6	7	7	7	6	7	7	7	7	7	7	5	5	5

Table G44: Perception Scores for Employees at Dealership L

DEALERSHIP L																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	4	3	2	3	5	6	6	5	7	5	5	6	5	6	6	5	6	6	7	6	6	6
Employee 2	1	1	6	5	5	5	5	5	3	5	7	5	5	5	5	5	5	6	7	6	5	5
Employee 3	3	6	7	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	7	7	7	7	7	7	7
Employee 5	6	6	7	6	5	6	6	6	6	7	6	7	6	6	5	6	5	7	7	7	5	6

Table G45: Personal Details for Employees at Dealership M

DEALERSHIP M	
Personal Details	
Employee	Age Group
Employee 1	45-54
Employee 2	>55
Employee 3	25-34
Employee 4	45-54
Employee 5	45-54

Table G46: Importance Weighting Scores for Employees at Dealership M

DEALERSHIP M					
Importance Weighting					
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Employee 1	30	30	15	10	15
Employee 2	20	20	20	20	20
Employee 3	30	30	20	10	10
Employee 4	30	30	15	15	10
Employee 5	30	10	10	40	10

Table G47: Expectation Scores for Employees at Dealership M

DEALERSHIP M																						
Expectation Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7	EQ8	EQ9	EQ10	EQ11	EQ12	EQ13	EQ14	EQ15	EQ16	EQ17	EQ18	EQ19	EQ20	EQ21	EQ22
Employee 1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 3	7	7	7	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	
Employee 4	6	6	6	7	5	7	5	5	5	6	6	6	6	6	6	6	5	6	7	7	7	6
Employee 5	6	5	7	7	5	6	4	2	5	6	6	7	3	4	7	5	5	7	7	7	7	7

Table G48: Perception Scores for Employees at Dealership M

DEALERSHIP M																						
Perception Measurement																						
Employee	Tangibles				Reliability					Responsiveness				Assurance				Empathy				
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16	PQ17	PQ18	PQ19	PQ20	PQ21	PQ22
Employee 1	5	7	6	6	6	7	6	6	6	7	6	6	6	6	6	4	6	6	6	6	6	6
Employee 2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 3	7	7	7	7	5	7	7	5	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Employee 4	6	6	6	6	6	6	6	6	7	6	6	6	6	5	6	6	5	5	7	6	7	7
Employee 5	7	5	7	7	7	7	4	5	4	7	7	7	4	7	7	6	5	5	7	7	7	7

9.8 Appendix H – Financial Analysis Data

In this Appendix one can find the extracted financial data from the income statements of the various dealerships as well as the calculated measures of profit used during this research.

Table H1: Financial Data of Dealership A

DEALERSHIP A					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	3325	Supply/Material/Consum. Sales	152	Service Labour Sales	4002
Labour Sales Warranty	430	Sublet/Outwork	728	Other Service Sales	1325
Labour Sales Internal	247	Own Orders	-		
Labour Sales Other	-	Oil & Grease	445		
		Sundry Sales	-		
		Tyres & Tubes	-		
	4002		1325	TOTAL SALES	5327
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	318	Supply/Mat/Consum. Costs	47	Service Labour Costs	318
Labour Cost – Warranty	-	Sublet/Outwork Costs	556	Other Service Costs	965
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	255
Labour Cost – Other	-	Oil & Grease Costs	274		
	318	Additives Costs	-		
		Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	255	Cleaning Costs - Sub Contractors	88		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	63				
Volume Discount Allowed	18				
	336		965	TOTAL COSTS	1538
GROSS PROFIT					
Customer Labour	3007		Other	360	
% GP of Customer Labour Sales	0.9044		% GP of Other Service Sales	0.2716	

Table H2: Dealership B Financial Data

DEALERSHIP B					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	6141	Supply/Material/Consum. Sales	315	Service Labour Sales	7409
Labour Sales Warranty	726	Sublet/Outwork	585	Other Service Sales	1813
Labour Sales Internal	541	Own Orders	-		
Labour Sales Other	1	Oil & Grease	913		
		Sundry Sales	-		
		Tyres & Tubes	-		
	7409		1813	TOTAL SALES	9222
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	1243	Supply/Mat/Consum. Costs	162	Service Labour Costs	1380
Labour Cost – Warranty	81	Sublet/Outwork Costs	338	Other Service Costs	1248
Labour Cost – Internal	56	Own Orders Costs	-	Idle Time	38
Labour Cost – Other	-	Oil & Grease Costs	633		
	1380	Additives Costs	-		
		Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	38	Cleaning Costs - Sub Contractors	115		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	92				
Volume Discount Allowed	1				
	131		1248	TOTAL COSTS	2666
GROSS PROFIT					
Customer Labour	4761		Other	565	
% GP of Customer Labour Sales	0.7753		% GP of Other Service Sales	0.3116	

Table H3: Dealership D Financial Data

DEALERSHIP D					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	3439	Supply/Material/Consum. Sales	1429	Service Labour Sales	7793
Labour Sales Warranty	2993	Sublet/Outwork	2437	Other Service Sales	5223
Labour Sales Internal	1361	Own Orders	-		
Labour Sales Other	-	Oil & Grease	1357		
		Sundry Sales	-		
		Tyres & Tubes	-		
	7793		5223	TOTAL SALES	13016
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	1389	Supply/Mat/Consum. Costs	608	Service Labour Costs	1391
Labour Cost – Warranty	1	Sublet/Outwork Costs	2074	Other Service Costs	3590
Labour Cost – Internal	1	Own Orders Costs	-	Idle Time	113
Labour Cost – Other	-	Oil & Grease Costs	688		
		Additives Costs	-		
	1391	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	44		
Idle Time	113	Cleaning Costs - Sub Contractors	176		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	-				
Volume Discount Allowed	19				
	132		3590	TOTAL COSTS	5094
GROSS PROFIT					
Customer Labour	2048		Other	1633	
% GP of Customer Labour Sales	0.5955		% GP of Other Service Sales	0.3126	

Table H4: Dealership E Financial Data

DEALERSHIP E					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	2399	Supply/Material/Consum. Sales	117	Service Labour Sales	2925
Labour Sales Warranty	199	Sublet/Outwork	588	Other Service Sales	891
Labour Sales Internal	327	Own Orders	-		
Labour Sales Other	-	Oil & Grease	186		
		Sundry Sales	-		
		Tyres & Tubes	-		
	2925		891	TOTAL SALES	3816
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	531	Supply/Mat/Consum. Costs	1	Service Labour Costs	552
Labour Cost – Warranty	21	Sublet/Outwork Costs	510	Other Service Costs	699
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	40
Labour Cost – Other	-	Oil & Grease Costs	90		
		Additives Costs	-		
	552	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	40	Cleaning Costs - Sub Contractors	98		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	-				
Volume Discount Allowed	4				
	44		699	TOTAL COSTS	1291
GROSS PROFIT					
Customer Labour	1847		Other	192	
% GP of Customer Labour Sales	0.7699		% GP of Other Service Sales	0.2154	

Table H5: Dealership F Financial Data

DEALERSHIP F					
SERVICE LABOUR SALES BREAKDOWN		SERVICE OTHER SALES BREAKDOWN		SALES	
Labour Sales Customer	2269	Supply/Material/Consum. Sales	185	Service Labour Sales	3790
Labour Sales Warranty	891	Sublet/Outwork	822	Other Service Sales	1509
Labour Sales Internal	630	Own Orders	-		
Labour Sales Other	-	Oil & Grease	502		
		Sundry Sales	-		
		Tyres & Tubes	-		
	3790		1509	TOTAL SALES	5299
SERVICE LABOUR COSTS BREAKDOWN		SERVICE OTHER COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	573	Supply/Mat/Consum. Costs	105	Service Labour Costs	581
Labour Cost – Warranty	8	Sublet/Outwork Costs	765	Other Service Costs	1241
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	160
Labour Cost – Other	-	Oil & Grease Costs	268		
		Additives Costs	-		
	581	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	160	Cleaning Costs - Sub Contractors	103		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	-				
Volume Discount Allowed	25				
	185		1241	TOTAL COSTS	1982
GROSS PROFIT					
Customer Labour	1688		Other	268	
% GP of Customer Labour Sales	0.7439		% GP of Other Service Sales	0.1776	

Table H6: Dealership G Financial Data

DEALERSHIP G					
SERVICE LABOUR SALES BREAKDOWN		SERVICE OTHER SALES BREAKDOWN		SALES	
Labour Sales Customer	4029	Supply/Material/Consum. Sales	152	Service Labour Sales	6252
Labour Sales Warranty	469	Sublet/Outwork	1200	Other Service Sales	2153
Labour Sales Internal	1754	Own Orders	-		
Labour Sales Other	-	Oil & Grease	801		
		Sundry Sales	-		
		Tyres & Tubes	-		
	6252		2153	TOTAL SALES	8405
SERVICE LABOUR COSTS BREAKDOWN		SERVICE OTHER COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	754	Supply/Mat/Consum. Costs	16	Service Labour Costs	754
Labour Cost – Warranty	-	Sublet/Outwork Costs	1060	Other Service Costs	1611
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	110
Labour Cost – Other	-	Oil & Grease Costs	379		
		Additives Costs	-		
	754	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	110	Cleaning Costs - Sub Contractors	156		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	204				
Volume Discount Allowed	39				
	353		1611	TOTAL COSTS	2475
GROSS PROFIT					
Customer Labour	3275		Other	542	
% GP of Customer Labour Sales	0.8129		% GP of Other Service Sales	0.2517	

Table H7: Dealership H Financial Data

DEALERSHIP H					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	2542	Supply/Material/Consum. Sales	110	Service Labour Sales	2950
Labour Sales Warranty	90	Sublet/Outwork	419	Other Service Sales	846
Labour Sales Internal	318	Own Orders	-		
Labour Sales Other	-	Oil & Grease	317		
		Sundry Sales	-		
		Tyres & Tubes	-		
	2950		846	TOTAL SALES	3796
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	342	Supply/Mat/Consum. Costs	11	Service Labour Costs	342
Labour Cost – Warranty	0	Sublet/Outwork Costs	340	Other Service Costs	521
Labour Cost – Internal	0	Own Orders Costs	-	Idle Time	166
Labour Cost – Other	0	Oil & Grease Costs	170		
		Additives Costs	-		
	342	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	166	Cleaning Costs - Sub Contractors	-		
Salvage Gains	0	Parts Other Makes	-		
Incentive Received	0				
Volume Discount Allowed	16				
	182		521	TOTAL COSTS	1029
GROSS PROFIT					
Customer Labour	220		Other	325	
% GP of Customer Labour Sales	0.8655		% GP of Other Service Sales	0.3841	

Table H8: Dealership I Financial Data

DEALERSHIP I					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	4757	Supply/Material/Consum. Sales	135	Service Labour Sales	6327
Labour Sales Warranty	646	Sublet/Outwork	921	Other Service Sales	1485
Labour Sales Internal	924	Own Orders	-		
Labour Sales Other	-	Oil & Grease	429		
		Sundry Sales	-		
		Tyres & Tubes	-		
	6327		1485	TOTAL SALES	7812
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	884	Supply/Mat/Consum. Costs	31	Service Labour Costs	1076
Labour Cost – Warranty	-	Sublet/Outwork Costs	749	Other Service Costs	1241
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	328
Labour Cost – Other	192	Oil & Grease Costs	259		
		Additives Costs	-		
	1076	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	328	Cleaning Costs - Sub Contractors	202		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	373				
Volume Discount Allowed	114				
	815		1241	TOTAL COSTS	2645
GROSS PROFIT					
Customer Labour	3681		Other	244	
% GP of Customer Labour Sales	0.7738		% GP of Other Service Sales	0.1643	

Table H9: Dealership J Financial Data

DEALERSHIP J					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	7603	Supply/Material/Consum. Sales	-	Service Labour Sales	9540
Labour Sales Warranty	1118	Sublet/Outwork	736	Other Service Sales	1715
Labour Sales Internal	819	Own Orders	-		
Labour Sales Other		Oil & Grease	979		
		Sundry Sales	-		
		Tyres & Tubes	-		
	9540		1715	TOTAL SALES	11255
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	2356	Supply/Mat/Consum. Costs		Service Labour Costs	2356
Labour Cost – Warranty		Sublet/Outwork Costs	655	Other Service Costs	1123
Labour Cost – Internal		Own Orders Costs		Idle Time	
Labour Cost – Other		Oil & Grease Costs	468		
		Additives Costs			
	2356	Tyres & Tubes Costs			
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House			
Idle Time	-	Cleaning Costs - Sub Contractors			
Salvage Gains	-	Parts Other Makes			
Incentive Received	266				
Volume Discount Allowed	-				
	266		1123	TOTAL COSTS	3479
GROSS PROFIT					
Customer Labour	5247		Other	592	
% GP of Customer Labour Sales	0.6901		% GP of Other Service Sales	0.3452	

Table H10: Dealership K Financial Data

DEALERSHIP K					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	6046	Supply/Material/Consum. Sales	-	Service Labour Sales	8579
Labour Sales Warranty	984	Sublet/Outwork	1007	Other Service Sales	1231
Labour Sales Internal	1549	Own Orders	-		
Labour Sales Other	-	Oil & Grease	224		
		Sundry Sales	-		
		Tyres & Tubes	-		
	8579		1231	TOTAL SALES	9810
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	2551	Supply/Mat/Consum. COS	-	Service Labour Costs	3200
Labour Cost – Warranty		Sublet/Outwork COS	945	Other Service Costs	1120
Labour Cost – Internal	649	Own Orders Cos	-	Idle Time	0
Labour Cost – Other	0	Oil & Grease Cos	175		
		Additives Cos	-		
	3200	Tyres & Tubes Cos	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	0	Cleaning Costs - Sub Contractors	-		
Salvage Gains	0	Parts Other Makes	-		
Incentive Received	0				
Volume Discount Allowed	0				
	0		1120	TOTAL COSTS	4320
GROSS PROFIT					
Customer Labour	2846		Other	111	
% GP of Customer Labour Sales	0.4707		% GP of Other Service Sales	0.0902	

Table H11: Dealership L Financial Data

DEALERSHIP L					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	1974	Supply/Material/Consum. Sales	113	Service Labour Sales	6429
Labour Sales Warranty	3995	Sublet/Outwork	1055	Other Service Sales	1460
Labour Sales Internal	460	Own Orders	-		
Labour Sales Other	-	Oil & Grease	292		
		Sundry Sales	-		
		Tyres & Tubes	-		
	6429		1460	TOTAL SALES	7889
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	1083	Supply/Mat/Consum. Costs	-	Service Labour Costs	1083
Labour Cost – Warranty	-	Sublet/Outwork Costs	951	Other Service Costs	1287
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	6
Labour Cost – Other	-	Oil & Grease Costs	125		
	1083	Additives Costs	1		
		Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	6	Cleaning Costs - Sub Contractors	210		
Salvage Gains	0	Parts Other Makes	-		
Incentive Received	212				
Volume Discount Allowed	0				
	218		1287	TOTAL COSTS	2376
GROSS PROFIT					
Customer Labour	891		Other	173	
% GP of Customer Labour Sales	0.4514		% GP of Other Service Sales	0.1184	

Table H12: Dealership M Financial Data

DEALERSHIP M					
SERVICE LABOUR SALES BREAKDOWN		OTHER SERVICE SALES BREAKDOWN		SALES	
Labour Sales Customer	2169534	Supply/Material/Consum. Sales	-	Service Labour Sales	2169534
Labour Sales Warranty	-	Sublet/Outwork	596671	Other Service Sales	990544
Labour Sales Internal	-	Own Orders	-		
Labour Sales Other	-	Oil & Grease	337292		
		Sundry Sales	56581		
		Tyres & Tubes	-		
	2169534		990544	TOTAL SALES	3160078
SERVICE LABOUR COSTS BREAKDOWN		OTHER SERVICE COSTS BREAKDOWN		COST OF SALES	
Labour Cost – Customer	457031	Supply/Mat/Consum. Costs	-	Service Labour Costs	457031
Labour Cost – Warranty	-	Sublet/Outwork Costs	514362	Other Service Costs	757481
Labour Cost – Internal	-	Own Orders Costs	-	Idle Time	0
Labour Cost – Other	-	Oil & Grease Costs	243119		
		Additives Costs	-		
	457031	Tyres & Tubes Costs	-		
TRADING EXPENSES/REVENUE BREAKDOWN		Cleaning Costs - In House	-		
Idle Time	-	Cleaning Costs - Sub Contractors	-		
Salvage Gains	-	Parts Other Makes	-		
Incentive Received	-				
Volume Discount Allowed	-				
	0		757481	TOTAL COSTS	1214512
GROSS PROFIT					
Customer Labour	1712503		Other	233063	
% GP of Customer Labour Sales	0.7893		% GP of Other Service Sales	0.2352	

9.9 Appendix I – Dealership Customer Results

In the following Appendix all the calculated results from the Customers' data from Appendix F can be found. These results include the Customers' Expectation Sub-Total Scores; Customers' Perception Sub-Total Scores; Customers' SERVQUAL Calculated Scores; Customers' SERVPERF Calculated Scores and the Customers' Cronbach Alpha Scores. Each Table indicates the Dealership whose data is being displayed.

Tables for Dealership A also contain the column numbering assigned to each of the five types of results tables for each Dealership. This numbering is used when referring to a data set in Chapter 5.

Table I1: Expectation Sub-Total Scores for Customers at Dealership A

DEALERSHIP A						
Expectations Sub-Totals						
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	28	34	28	28	35	153
Customer 2	27	35	28	28	33	151
Customer 3	26	35	27	26	32	146
Customer 4	27	34	27	27	34	149
Customer 5	26	33	24	27	33	143
Customer 6	28	35	28	28	32	151
Customer 7	25	33	28	27	33	146
Customer 8	24	35	26	26	30	141
Customer 9	20	26	24	25	26	121
Customer 10	23	26	25	26	25	125
Customer 11	24	33	28	28	35	148
Customer 12	28	33	18	24	30	133
Customer 13	17	35	25	27	30	134
Customer 14	26	34	27	28	34	149
Customer 15	23	30	26	26	33	138
Customer 16	26	32	25	24	30	137
Customer 17	27	35	28	27	33	150
Customer 18	18	23	18	20	31	110
Customer 19	24	25	17	26	25	117
Customer 20	25	33	28	28	35	149

Customer 21	22	30	24	24	30	130
Customer 22	23	29	27	28	35	142
Customer 23	22	34	26	27	35	144
Customer 24	24	33	27	26	33	143
Customer 25	28	35	28	28	35	154
Customer 26	20	31	23	22	30	126
Customer 27	27	33	27	25	34	146
Customer 28	28	35	28	28	35	154
Customer 29	23	30	23	24	30	130
Customer 30	23	34	22	23	26	128
Customer 31	24	33	25	28	31	141
Customer 32	28	35	28	27	29	147
Customer 33	25	33	26	26	34	144
Customer 34	21	29	21	23	27	121
Customer 35	18	35	28	28	35	144
Customer 36	26	31	26	27	31	141
Customer 37	14	34	28	27	34	137

Table I2: Perception Sub-Total Scores for Customers at Dealership A

DEALERSHIP A						
Perceptions Sub-Totals						
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	22	24	24	25	32	127
Customer 2	17	26	19	20	26	108
Customer 3	24	33	28	26	35	146
Customer 4	28	33	28	28	35	152
Customer 5	25	25	23	26	32	131
Customer 6	20	35	28	28	35	146
Customer 7	19	20	7	11	20	77
Customer 8	20	24	21	24	30	119
Customer 9	24	22	22	25	27	120
Customer 10	24	12	26	25	24	111
Customer 11	26	34	28	28	35	151
Customer 12	20	25	18	24	30	117
Customer 13	23	35	24	24	33	139
Customer 14	23	34	27	26	35	145
Customer 15	27	31	28	25	33	144
Customer 16	25	32	24	27	30	138
Customer 17	20	28	25	23	30	126
Customer 18	17	27	21	17	27	109
Customer 19	21	25	14	17	24	101
Customer 20	23	28	24	25	29	129
Customer 21	18	34	20	26	34	132
Customer 22	22	30	28	28	35	143
Customer 23	18	33	25	25	33	134
Customer 24	24	35	28	27	35	149
Customer 25	14	9	14	16	22	75
Customer 26	26	31	26	25	33	141
Customer 27	22	33	25	27	30	137
Customer 28	17	8	4	7	12	48
Customer 29	20	25	20	23	27	115
Customer 30	15	24	20	21	26	106
Customer 31	16	25	23	24	27	115
Customer 32	18	29	20	18	20	105
Customer 33	24	28	25	24	30	131
Customer 34	23	29	22	21	29	124
Customer 35	23	35	28	28	34	148
Customer 36	27	33	28	25	31	144
Customer 37	17	34	26	24	33	134

Table I3: SERVQUAL Calculated Scores for Customers at Dealership A

DEALERSHIP A							
Calculated Scores							
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	SERVQUAL SCORE	
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Un-weighted	Weighted
Customer 1	-1.50	-2.00	-1.00	-0.75	-0.60	-1.17	-1.17
Customer 2	-2.50	-1.80	-2.25	-2.00	-1.40	-1.99	-1.98
Customer 3	-0.50	-0.40	0.25	0.00	0.60	-0.01	-0.01
Customer 4	0.25	-0.20	0.25	0.25	0.20	0.15	0.16
Customer 5	-0.25	-1.60	-0.25	-0.25	-0.20	-0.51	-0.38
Customer 6	-2.00	0.00	0.00	0.00	0.60	-0.28	-0.34
Customer 7	-1.50	-2.60	-5.25	-4.00	-2.60	-3.19	-3.19
Customer 8	-1.00	-2.20	-1.25	-0.50	0.00	-0.99	-1.16
Customer 9	1.00	-0.80	-0.50	0.00	0.20	-0.02	-0.10
Customer 10	0.25	-2.80	0.25	-0.25	-0.20	-0.55	-1.35
Customer 11	0.50	0.20	0.00	0.00	0.00	0.14	0.14
Customer 12	-2.00	-1.60	0.00	0.00	0.00	-0.72	-0.72
Customer 13	1.50	0.00	-0.25	-0.75	0.60	0.22	-0.02
Customer 14	-0.75	0.00	0.00	-0.50	0.20	-0.21	-0.20
Customer 15	1.00	0.20	0.50	-0.25	0.00	0.29	0.29
Customer 16	-0.25	0.00	-0.25	0.75	0.00	0.05	0.10
Customer 17	-1.75	-1.40	-0.75	-1.00	-0.60	-1.10	-1.07
Customer 18	-0.25	0.80	0.75	-0.75	-0.80	-0.05	0.24
Customer 19	-0.75	0.00	-0.75	-2.25	-0.20	-0.79	-0.50
Customer 20	-0.50	-1.00	-1.00	-0.75	-1.20	-0.89	-1.00
Customer 21	-1.00	0.80	-1.00	0.50	0.80	0.02	0.20
Customer 22	-0.25	0.20	0.25	0.00	0.00	0.04	0.04
Customer 23	-1.00	-0.20	-0.25	-0.50	-0.40	-0.47	-0.34
Customer 24	0.00	0.40	0.25	0.25	0.40	0.26	0.26
Customer 25	-3.50	-5.20	-3.50	-3.00	-2.60	-3.56	-3.56
Customer 26	1.50	0.00	0.75	0.75	0.60	0.72	0.44
Customer 27	-1.25	0.00	-0.50	0.50	-0.80	-0.41	-0.70
Customer 28	-2.75	-5.40	-6.00	-5.25	-4.60	-4.80	-5.26
Customer 29	-0.75	-1.00	-0.75	-0.25	-0.60	-0.67	-0.70
Customer 30	-2.00	-2.00	-0.50	-0.50	0.00	-1.00	-0.95
Customer 31	-2.00	-1.60	-0.50	-1.00	-0.80	-1.18	-1.22
Customer 32	-2.50	-1.20	-2.00	-2.25	-1.80	-1.95	-1.55
Customer 33	-0.25	-1.00	-0.25	-0.50	-0.80	-0.56	-0.61
Customer 34	0.50	0.00	0.25	-0.50	0.40	0.13	0.30
Customer 35	1.25	0.00	0.00	0.00	-0.20	0.21	-0.15
Customer 36	0.25	0.40	0.50	-0.50	0.00	0.13	0.13
Customer 37	0.75	0.00	-0.50	-0.75	-0.20	-0.14	-0.28
Average	-0.65	-0.89	-0.68	-0.70	-0.43	-0.67	-0.71

Table I4: SERVPERF Calculated Scores for Customers at Dealership A

DEALERSHIP A							
Calculated Scores							
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	SERVPERF SCORE	
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	Un-weighted	Weighted
Customer 1	5.50	4.80	6.00	6.25	6.40	5.79	5.79
Customer 2	4.25	5.20	4.75	5.00	5.20	4.88	4.95
Customer 3	6.00	6.60	7.00	6.50	7.00	6.62	6.62
Customer 4	7.00	6.60	7.00	7.00	7.00	6.92	6.93
Customer 5	6.25	5.00	5.75	6.50	6.40	5.98	6.09
Customer 6	5.00	7.00	7.00	7.00	7.00	6.60	6.60
Customer 7	4.75	4.00	1.75	2.75	4.00	3.45	3.45
Customer 8	5.00	4.80	5.25	6.00	6.00	5.41	5.39
Customer 9	6.00	4.40	5.50	6.25	5.40	5.51	5.36
Customer 10	6.00	2.40	6.50	6.25	4.80	5.19	4.19
Customer 11	6.50	6.80	7.00	7.00	7.00	6.86	6.86
Customer 12	5.00	5.00	4.50	6.00	6.00	5.30	5.30
Customer 13	5.75	7.00	6.00	6.00	6.60	6.27	6.34
Customer 14	5.75	6.80	6.75	6.50	7.00	6.56	6.53
Customer 15	6.75	6.20	7.00	6.25	6.60	6.56	6.56
Customer 16	6.25	6.40	6.00	6.75	6.00	6.28	6.33
Customer 17	5.00	5.60	6.25	5.75	6.00	5.72	5.78
Customer 18	4.25	5.40	5.25	4.25	5.40	4.91	4.92
Customer 19	5.25	5.00	3.50	4.25	4.80	4.56	4.73
Customer 20	5.75	5.60	6.00	6.25	5.80	5.88	5.92
Customer 21	4.50	6.80	5.00	6.50	6.80	5.92	6.15
Customer 22	5.50	6.00	7.00	7.00	7.00	6.50	6.50
Customer 23	4.50	6.60	6.25	6.25	6.60	6.04	6.32
Customer 24	6.00	7.00	7.00	6.75	7.00	6.75	6.75
Customer 25	3.50	1.80	3.50	4.00	4.40	3.44	3.44
Customer 26	6.50	6.20	6.50	6.25	6.60	6.41	6.34
Customer 27	5.50	6.60	6.25	6.75	6.00	6.22	6.01
Customer 28	4.25	1.60	1.00	1.75	2.40	2.20	1.74
Customer 29	5.00	5.00	5.00	5.75	5.40	5.23	5.21
Customer 30	3.75	4.80	5.00	5.25	5.20	4.80	4.90
Customer 31	4.00	5.00	5.75	6.00	5.40	5.23	5.26
Customer 32	4.50	5.80	5.00	4.50	4.00	4.76	5.35
Customer 33	6.00	5.60	6.25	6.00	6.00	5.97	5.91
Customer 34	5.75	5.80	5.50	5.25	5.80	5.62	5.73
Customer 35	5.75	7.00	7.00	7.00	6.80	6.71	6.85
Customer 36	6.75	6.60	7.00	6.25	6.20	6.56	6.56
Customer 37	4.25	6.80	6.50	6.00	6.60	6.03	6.40
Average	5.35	5.56	5.68	5.83	5.91	5.67	5.68

Table I5: Cronbach Alpha Scores for Customers at Dealership A

DEALERSHIP A					
Expectations					
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.89	0.81	0.85	0.80	0.75
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.79	0.93	0.90	0.90	0.88

Table I6: Expectation Sub-Total Scores for Customers at Dealership B

DEALERSHIP B						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	28	35	28	28	35	154
Customer 2	24	31	25	24	35	139
Customer 3	27	34	28	28	35	152
Customer 4	28	35	28	28	35	154
Customer 5	28	35	28	28	33	152
Customer 6	27	34	28	28	33	150
Customer 7	24	35	27	27	34	147
Customer 8	24	34	26	24	29	137
Customer 9	20	26	18	20	24	108
Customer 10	28	35	28	28	35	154
Customer 11	26	33	27	28	31	145
Customer 12	27	33	26	27	31	144
Customer 13	28	35	28	28	35	154
Customer 14	28	35	28	28	35	154
Customer 15	27	35	28	28	35	153
Customer 16	28	35	28	28	35	154
Customer 17	27	35	28	28	33	151
Customer 18	28	35	28	28	34	153
Customer 19	27	32	25	25	30	139
Customer 20	26	35	28	28	35	152
Customer 21	24	30	24	24	30	132
Customer 22	23	35	27	26	30	141
Customer 23	28	35	28	28	35	154
Customer 24	28	33	28	28	35	152
Customer 25	28	35	28	28	35	154

Customer 26	24	29	23	24	29	129
Customer 27	26	34	28	28	32	148
Customer 28	28	35	28	28	35	154
Customer 29	25	33	28	24	32	142
Customer 30	26	34	28	28	35	151
Customer 31	28	32	26	26	35	147
Customer 32	27	33	26	25	35	146
Customer 33	22	35	28	27	35	147
Customer 34	22	35	25	25	29	136
Customer 35	22	33	22	25	29	131
Customer 36	27	35	28	28	35	153
Customer 37	26	35	27	25	34	147
Customer 38	23	34	27	28	31	143
Customer 39	22	35	25	27	33	142
Customer 40	27	35	28	27	35	152
Customer 41	26	35	28	28	30	147
Customer 42	25	35	28	27	35	150
Customer 43	23	23	17	22	30	115
Customer 44	24	33	25	24	30	136
Customer 45	24	31	26	23	28	132
Customer 46	22	32	28	26	23	131
Customer 47	25	30	21	23	29	128
Customer 48	28	35	25	25	28	141
Customer 49	25	35	27	25	30	142
Customer 50	28	35	26	26	33	148
Customer 51	26	35	28	28	35	152
Customer 52	26	35	25	26	28	140
Customer 53	28	35	28	28	35	154
Customer 54	27	35	28	27	34	151
Customer 55	26	35	26	28	32	147
Customer 56	21	35	28	28	35	147
Customer 57	23	33	26	20	32	134
Customer 58	22	27	22	22	28	121
Customer 59	23	35	28	28	35	149
Customer 60	22	32	27	24	32	137

Table 17: Perception Sub-Total Scores for Customers at Dealership B

DEALERSHIP B						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	16	21	21	20	27	105
Customer 2	24	35	25	24	35	143
Customer 3	28	35	28	28	35	154
Customer 4	28	28	26	28	35	145
Customer 5	27	17	22	16	26	108
Customer 6	21	27	21	21	27	117
Customer 7	24	25	21	24	28	122
Customer 8	22	30	23	25	30	130
Customer 9	24	26	23	24	27	124
Customer 10	28	33	28	28	33	150
Customer 11	24	29	24	25	31	133
Customer 12	24	30	27	24	29	134
Customer 13	23	18	24	21	27	113
Customer 14	23	22	25	26	32	128
Customer 15	21	6	7	6	9	49
Customer 16	25	32	28	28	35	148
Customer 17	27	33	26	27	33	146
Customer 18	26	26	25	27	31	135
Customer 19	25	32	26	25	33	141
Customer 20	23	23	22	22	25	115
Customer 21	20	10	14	15	21	80
Customer 22	18	29	19	17	25	108
Customer 23	28	34	28	28	35	153
Customer 24	21	23	22	18	23	107
Customer 25	27	33	28	27	32	147
Customer 26	22	27	24	23	28	124
Customer 27	28	35	26	28	32	149
Customer 28	27	33	25	24	30	139
Customer 29	21	31	26	25	33	136
Customer 30	28	35	28	28	35	154
Customer 31	25	32	24	26	34	141
Customer 32	26	29	25	28	35	143
Customer 33	26	30	19	20	28	123
Customer 34	15	10	16	13	21	75
Customer 35	25	31	21	21	24	122
Customer 36	28	35	28	28	35	154
Customer 37	18	25	18	24	28	113

Customer 38	19	30	25	28	32	134
Customer 39	27	19	18	11	28	103
Customer 40	21	24	16	22	28	111
Customer 41	28	9	12	10	14	73
Customer 42	27	34	25	26	30	142
Customer 43	25	28	19	24	30	126
Customer 44	23	23	20	20	26	112
Customer 45	26	32	28	27	33	146
Customer 46	25	29	23	16	16	109
Customer 47	23	28	24	25	33	133
Customer 48	21	29	22	22	28	122
Customer 49	22	22	19	22	27	112
Customer 50	26	35	26	26	34	147
Customer 51	24	16	16	15	20	91
Customer 52	25	35	28	26	29	143
Customer 53	28	35	28	28	35	154
Customer 54	22	19	16	18	21	96
Customer 55	25	34	27	27	32	145
Customer 56	27	20	16	18	31	112
Customer 57	20	28	16	24	29	117
Customer 58	19	15	13	11	12	70
Customer 59	24	30	23	24	25	126
Customer 60	-	-	-	-	-	-

Table 18: SERVQUAL Calculated Scores for Customers at Dealership B

DEALERSHIP B							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	-3.00	-2.80	-1.75	-2.00	-1.60	-2.23	-2.41
Customer 2	0.00	0.80	0.00	0.00	0.00	0.16	0.20
Customer 3	0.25	0.20	0.00	0.00	0.00	0.09	0.13
Customer 4	0.00	-1.40	-0.50	0.00	0.00	-0.38	-0.46
Customer 5	-0.25	-3.60	-1.50	-3.00	-1.40	-1.95	-2.17
Customer 6	-1.50	-1.40	-1.75	-1.75	-1.20	-1.52	-1.56
Customer 7	0.00	-2.00	-1.50	-0.75	-1.20	-1.09	-1.82
Customer 8	-0.50	-0.80	-0.75	0.25	0.20	-0.32	-0.46
Customer 9	1.00	0.00	1.25	1.00	0.60	0.77	0.45
Customer 10	0.00	-0.40	0.00	0.00	-0.40	-0.16	-0.22
Customer 11	-0.50	-0.80	-0.75	-0.75	0.00	-0.56	-0.67
Customer 12	-0.75	-0.60	0.25	-0.75	-0.40	-0.45	-0.57
Customer 13	-1.25	-3.40	-1.00	-1.75	-1.60	-1.80	-1.91
Customer 14	-1.25	-2.60	-0.75	-0.50	-0.60	-1.14	-1.94
Customer 15	-1.50	-5.80	-5.25	-5.50	-5.20	-4.65	-4.65
Customer 16	-0.75	-0.60	0.00	0.00	0.00	-0.27	-0.21
Customer 17	0.00	-0.40	-0.50	-0.25	0.00	-0.23	-0.27
Customer 18	-0.50	-1.80	-0.75	-0.25	-0.60	-0.78	-1.35
Customer 19	-0.50	0.00	0.25	0.00	0.60	0.07	0.12
Customer 20	-0.75	-2.40	-1.50	-1.50	-2.00	-1.63	-2.02
Customer 21	-1.00	-4.00	-2.50	-2.25	-1.80	-2.31	-2.37
Customer 22	-1.25	-1.20	-2.00	-2.25	-1.00	-1.54	-1.46
Customer 23	0.00	-0.20	0.00	0.00	0.00	-0.04	-0.04
Customer 24	-1.75	-2.00	-1.50	-2.50	-2.40	-2.03	-2.03
Customer 25	-0.25	-0.40	0.00	-0.25	-0.60	-0.30	-0.36
Customer 26	-0.50	-0.40	0.25	-0.25	-0.20	-0.22	-0.19
Customer 27	0.50	0.20	-0.50	0.00	0.00	0.04	0.21
Customer 28	-0.25	-0.40	-0.75	-1.00	-1.00	-0.68	-0.54
Customer 29	-1.00	-0.40	-0.50	0.25	0.20	-0.29	-0.26
Customer 30	0.50	0.20	0.00	0.00	0.00	0.14	0.19
Customer 31	-0.75	0.00	-0.50	0.00	-0.20	-0.29	-0.29
Customer 32	-0.25	-0.80	-0.25	0.75	0.00	-0.11	-0.32
Customer 33	1.00	-1.00	-2.25	-1.75	-1.40	-1.08	-1.14
Customer 34	-1.75	-5.00	-2.25	-3.00	-1.60	-2.72	-3.39
Customer 35	0.75	-0.40	-0.25	-1.00	-1.00	-0.38	-0.41
Customer 36	0.25	0.00	0.00	0.00	0.00	0.05	0.05

Customer 37	-2.00	-2.00	-2.25	-0.25	-1.20	-1.54	-1.67
Customer 38	-1.00	-0.80	-0.50	0.00	0.20	-0.42	-0.36
Customer 39	1.25	-3.20	-1.75	-4.00	-1.00	-1.74	-2.19
Customer 40	-1.50	-2.20	-3.00	-1.25	-1.40	-1.87	-1.84
Customer 41	0.50	-5.20	-4.00	-4.50	-3.20	-3.28	-3.99
Customer 42	0.50	-0.20	-0.75	-0.25	-1.00	-0.34	-0.19
Customer 43	0.50	1.00	0.50	0.50	0.00	0.50	0.55
Customer 44	-0.25	-2.00	-1.25	-1.00	-0.80	-1.06	-0.89
Customer 45	0.50	0.20	0.50	1.00	1.00	0.64	0.56
Customer 46	0.75	-0.60	-1.25	-2.50	-1.40	-1.00	-0.76
Customer 47	-0.50	-0.40	0.75	0.50	0.80	0.23	0.31
Customer 48	-1.75	-1.20	-0.75	-0.75	0.00	-0.89	-1.11
Customer 49	-0.75	-2.60	-2.00	-0.75	-0.60	-1.34	-1.57
Customer 50	-0.50	0.00	0.00	0.00	0.20	-0.06	-0.03
Customer 51	-0.50	-3.80	-3.00	-3.25	-3.00	-2.71	-2.21
Customer 52	-0.25	0.00	0.75	0.00	0.20	0.14	0.22
Customer 53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 54	-1.25	-3.20	-3.00	-2.25	-2.60	-2.46	-2.74
Customer 55	-0.25	-0.20	0.25	-0.25	0.00	-0.09	-0.09
Customer 56	1.50	-3.00	-3.00	-2.50	-0.80	-1.56	-2.23
Customer 57	-0.75	-1.00	-2.50	1.00	-0.60	-0.77	-0.85
Customer 58	-0.75	-2.40	-2.25	-2.75	-3.20	-2.27	-2.25
Customer 59	0.25	-1.00	-1.25	-1.00	-2.00	-1.00	-1.02
Customer 60	-	-	-	-	-	-	-
Average	-0.40	-1.35	-1.00	-0.93	-0.78	-0.89	-0.99

Table I9: SERVPERF Calculated Scores for Customers at Dealership B

DEALERSHIP B							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	4.00	4.20	5.25	5.00	5.40	4.77	4.59
Customer 2	6.00	7.00	6.25	6.00	7.00	6.45	6.55
Customer 3	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 4	7.00	5.60	6.50	7.00	7.00	6.62	6.54
Customer 5	6.75	3.40	5.50	4.00	5.20	4.97	4.79
Customer 6	5.25	5.40	5.25	5.25	5.40	5.31	5.31
Customer 7	6.00	5.00	5.25	6.00	5.60	5.57	5.11
Customer 8	5.50	6.00	5.75	6.25	6.00	5.90	5.98
Customer 9	6.00	5.20	5.75	6.00	5.40	5.67	5.46
Customer 10	7.00	6.60	7.00	7.00	6.60	6.84	6.78
Customer 11	6.00	5.80	6.00	6.25	6.20	6.05	5.99
Customer 12	6.00	6.00	6.75	6.00	5.80	6.11	6.07
Customer 13	5.75	3.60	6.00	5.25	5.40	5.20	5.09
Customer 14	5.75	4.40	6.25	6.50	6.40	5.86	5.07
Customer 15	5.25	1.20	1.75	1.50	1.80	2.30	2.30
Customer 16	6.25	6.40	7.00	7.00	7.00	6.73	6.79
Customer 17	6.75	6.60	6.50	6.75	6.60	6.64	6.63
Customer 18	6.50	5.20	6.25	6.75	6.20	6.18	5.64
Customer 19	6.25	6.40	6.50	6.25	6.60	6.40	6.42
Customer 20	5.75	4.60	5.50	5.50	5.00	5.27	4.94
Customer 21	5.00	2.00	3.50	3.75	4.20	3.69	3.63
Customer 22	4.50	5.80	4.75	4.25	5.00	4.86	5.10
Customer 23	7.00	6.80	7.00	7.00	7.00	6.96	6.96
Customer 24	5.25	4.60	5.50	4.50	4.60	4.89	4.90
Customer 25	6.75	6.60	7.00	6.75	6.40	6.70	6.65
Customer 26	5.50	5.40	6.00	5.75	5.60	5.65	5.73
Customer 27	7.00	7.00	6.50	7.00	6.40	6.78	6.89
Customer 28	6.75	6.60	6.25	6.00	6.00	6.32	6.46
Customer 29	5.25	6.20	6.50	6.25	6.60	6.16	6.22
Customer 30	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 31	6.25	6.40	6.00	6.50	6.80	6.39	6.39
Customer 32	6.50	5.80	6.25	7.00	7.00	6.51	6.32
Customer 33	6.50	6.00	4.75	5.00	5.60	5.57	5.67
Customer 34	3.75	2.00	4.00	3.25	4.20	3.44	3.05
Customer 35	6.25	6.20	5.25	5.25	4.80	5.55	5.78
Customer 36	7.00	7.00	7.00	7.00	7.00	7.00	7.00

Customer 37	4.50	5.00	4.50	6.00	5.60	5.12	5.01
Customer 38	4.75	6.00	6.25	7.00	6.40	6.08	6.26
Customer 39	6.75	3.80	4.50	2.75	5.60	4.68	4.33
Customer 40	5.25	4.80	4.00	5.50	5.60	5.03	5.06
Customer 41	7.00	1.80	3.00	2.50	2.80	3.42	2.82
Customer 42	6.75	6.80	6.25	6.50	6.00	6.46	6.56
Customer 43	6.25	5.60	4.75	6.00	6.00	5.72	5.62
Customer 44	5.75	4.60	5.00	5.00	5.20	5.11	5.23
Customer 45	6.50	6.40	7.00	6.75	6.60	6.65	6.58
Customer 46	6.25	5.80	5.75	4.00	3.20	5.00	5.18
Customer 47	5.75	5.60	6.00	6.25	6.60	6.04	6.14
Customer 48	5.25	5.80	5.50	5.50	5.60	5.53	5.51
Customer 49	5.50	4.40	4.75	5.50	5.40	5.11	4.99
Customer 50	6.50	7.00	6.50	6.50	6.80	6.66	6.83
Customer 51	6.00	3.20	4.00	3.75	4.00	4.19	4.57
Customer 52	6.25	7.00	7.00	6.50	5.80	6.51	6.85
Customer 53	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 54	5.50	3.80	4.00	4.50	4.20	4.40	4.15
Customer 55	6.25	6.80	6.75	6.75	6.40	6.59	6.59
Customer 56	6.75	4.00	4.00	4.50	6.20	5.09	4.60
Customer 57	5.00	5.60	4.00	6.00	5.80	5.28	5.46
Customer 58	4.75	3.00	3.25	2.75	2.40	3.23	3.22
Customer 59	6.00	6.00	5.75	6.00	5.00	5.75	5.91
Customer 60	-	-	-	-	-	-	-
Average	5.99	5.37	5.61	5.64	5.69	5.66	5.61

Table I10: Cronbach Alpha Scores for Customers at Dealership B

DEALERSHIP B					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.70	0.88	0.85	0.76	0.85
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.83	0.94	0.89	0.92	0.92

Table I11: Expectation Sub-Total Scores for Customers at Dealership D

DEALERSHIP D						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	30	23	26	28	131
Customer 2	23	33	21	23	27	127
Customer 3	22	30	23	25	33	133
Customer 4	28	30	24	23	31	136
Customer 5	24	33	24	24	30	135
Customer 6	26	34	26	27	33	146
Customer 7	20	28	28	25	34	135
Customer 8	25	35	28	28	32	148
Customer 9	26	35	28	28	35	152
Customer 10	23	32	24	24	29	132
Customer 11	23	33	27	28	33	144
Customer 12	20	27	24	24	30	125
Customer 13	28	35	28	28	35	154
Customer 14	21	23	22	20	25	111
Customer 15	27	35	27	28	32	149
Customer 16	24	35	27	28	34	148
Customer 17	28	33	27	28	30	146
Customer 18	19	35	28	28	35	145
Customer 19	23	30	25	25	31	134
Customer 20	20	35	22	23	28	128
Customer 21	16	35	28	28	30	137
Customer 22	28	35	28	28	35	154
Customer 23	24	35	28	28	35	150
Customer 24	28	35	28	28	35	154
Customer 25	25	33	28	28	33	147
Customer 26	28	35	28	28	35	154
Customer 27	25	35	26	27	35	148
Customer 28	22	35	28	28	35	148
Customer 29	22	31	24	24	30	131
Customer 30	18	35	27	27	35	142
Customer 31	28	35	28	28	35	154
Customer 32	26	35	28	28	31	148
Customer 33	27	30	27	28	27	139

Table I12: Perception Sub-Total Scores for Customers at Dealership D

DEALERSHIP D						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	20	29	25	25	34	133
Customer 2	23	28	27	23	28	129
Customer 3	21	28	24	26	31	130
Customer 4	21	29	24	24	29	127
Customer 5	22	31	26	26	32	137
Customer 6	23	20	22	21	25	111
Customer 7	24	27	26	28	35	140
Customer 8	26	31	27	26	30	140
Customer 9	26	34	28	28	35	151
Customer 10	21	32	28	26	30	137
Customer 11	25	33	26	27	30	141
Customer 12	14	18	16	16	18	82
Customer 13	28	35	28	28	35	154
Customer 14	14	25	25	24	30	118
Customer 15	28	35	28	28	35	154
Customer 16	23	31	26	24	30	134
Customer 17	24	30	28	24	25	131
Customer 18	22	35	28	28	35	148
Customer 19	22	28	24	21	27	122
Customer 20	21	33	25	24	32	135
Customer 21	11	8	4	8	18	49
Customer 22	28	35	28	28	35	154
Customer 23	21	17	17	20	20	95
Customer 24	28	35	28	28	35	154
Customer 25	19	25	24	23	25	116
Customer 26	28	35	28	28	35	154
Customer 27	18	25	22	22	27	114
Customer 28	25	29	28	28	35	145
Customer 29	-	-	-	-	-	-
Customer 30	-	-	-	-	-	-
Customer 31	-	-	-	-	-	-
Customer 32	-	-	-	-	-	-
Customer 33	-	-	-	-	-	-

Table I13: SERVQUAL Calculated Scores for Customers at Dealership D

DEALERSHIP D							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	-1.00	-0.20	0.50	-0.25	1.20	0.05	-0.08
Customer 2	0.00	-1.00	1.50	0.00	0.20	0.14	0.03
Customer 3	-0.25	-0.40	0.25	0.25	-0.40	-0.11	-0.15
Customer 4	-1.75	-0.20	0.00	0.25	-0.40	-0.42	-0.42
Customer 5	-0.50	-0.40	0.50	0.50	0.40	0.10	0.12
Customer 6	-0.75	-2.80	-1.00	-1.50	-1.60	-1.53	-1.68
Customer 7	1.00	-0.20	-0.50	0.75	0.20	0.25	0.62
Customer 8	0.25	-0.80	-0.25	-0.50	-0.40	-0.34	-0.54
Customer 9	0.00	-0.20	0.00	0.00	0.00	-0.04	-0.10
Customer 10	-0.50	0.00	1.00	0.50	0.20	0.24	0.24
Customer 11	0.50	0.00	-0.25	-0.25	-0.60	-0.12	-0.07
Customer 12	-1.50	-1.80	-2.00	-2.00	-2.40	-1.94	-1.93
Customer 13	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 14	-1.75	0.40	0.75	1.00	1.00	0.28	0.21
Customer 15	0.25	0.00	0.25	0.00	0.60	0.22	0.10
Customer 16	-0.25	-0.80	-0.25	-1.00	-0.80	-0.62	-0.68
Customer 17	-1.00	-0.60	0.25	-1.00	-1.00	-0.67	-0.59
Customer 18	0.75	0.00	0.00	0.00	0.00	0.15	0.08
Customer 19	-0.25	-0.40	-0.25	-1.00	-0.80	-0.54	-0.49
Customer 20	0.25	-0.40	0.75	0.25	0.80	0.33	0.17
Customer 21	-1.25	-5.40	-6.00	-5.00	-2.40	-4.01	-4.93
Customer 22	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 23	-0.75	-3.60	-2.75	-2.00	-3.00	-2.42	-2.78
Customer 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 25	-1.50	-1.60	-1.00	-1.25	-1.60	-1.39	-1.44
Customer 26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 27	-1.75	-2.00	-1.00	-1.25	-1.60	-1.52	-1.52
Customer 28	0.75	-1.20	0.00	0.00	0.00	-0.09	-0.09
Customer 29	-	-	-	-	-	-	-
Customer 30	-	-	-	-	-	-	-
Customer 31	-	-	-	-	-	-	-
Customer 32	-	-	-	-	-	-	-
Customer 33	-	-	-	-	-	-	-
Average	-0.39	-0.84	-0.34	-0.48	-0.44	-0.50	-0.57

Table I14: SERVPERF Calculated Scores for Customers at Dealership D

DEALERSHIP D							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	5.00	5.80	6.25	6.25	6.80	6.02	5.96
Customer 2	5.75	5.60	6.75	5.75	5.60	5.89	5.88
Customer 3	5.25	5.60	6.00	6.50	6.20	5.91	6.00
Customer 4	5.25	5.80	6.00	6.00	5.80	5.77	5.77
Customer 5	5.50	6.20	6.50	6.50	6.40	6.22	6.30
Customer 6	5.75	4.00	5.50	5.25	5.00	5.10	4.98
Customer 7	6.00	5.40	6.50	7.00	7.00	6.38	6.37
Customer 8	6.50	6.20	6.75	6.50	6.00	6.39	6.33
Customer 9	6.50	6.80	7.00	7.00	7.00	6.86	6.85
Customer 10	5.25	6.40	7.00	6.50	6.00	6.23	6.45
Customer 11	6.25	6.60	6.50	6.75	6.00	6.42	6.45
Customer 12	3.50	3.60	4.00	4.00	3.60	3.74	3.68
Customer 13	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 14	3.50	5.00	6.25	6.00	6.00	5.35	5.26
Customer 15	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 16	5.75	6.20	6.50	6.00	6.00	6.09	6.12
Customer 17	6.00	6.00	7.00	6.00	5.00	6.00	6.15
Customer 18	5.50	7.00	7.00	7.00	7.00	6.70	6.85
Customer 19	5.50	5.60	6.00	5.25	5.40	5.55	5.60
Customer 20	5.25	6.60	6.25	6.00	6.40	6.10	6.28
Customer 21	2.75	1.60	1.00	2.00	3.60	2.19	1.82
Customer 22	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 23	5.25	3.40	4.25	5.00	4.00	4.38	4.12
Customer 24	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 25	4.75	5.00	6.00	5.75	5.00	5.30	5.25
Customer 26	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 27	4.50	5.00	5.50	5.50	5.40	5.18	5.19
Customer 28	6.25	5.80	7.00	7.00	7.00	6.61	6.61
Customer 29	-	-	-	-	-	-	-
Customer 30	-	-	-	-	-	-	-
Customer 31	-	-	-	-	-	-	-
Customer 32	-	-	-	-	-	-	-
Customer 33	-	-	-	-	-	-	-
Average	5.59	5.72	6.16	6.09	5.97	5.91	5.90

Table I15: Cronbach Alpha Scores for Customers at Dealership D

DEALERSHIP D					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.75	0.91	0.86	0.86	0.87
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.85	0.90	0.97	0.95	0.91

Table I16: Expectation Sub-Total Scores for Customers at Dealership E

DEALERSHIP E						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	35	28	28	35	150
Customer 2	25	33	24	27	30	139
Customer 3	23	30	26	24	30	133
Customer 4	20	28	22	23	28	121
Customer 5	21	32	20	20	34	127
Customer 6	23	34	27	25	33	142
Customer 7	23	35	27	28	35	148
Customer 8	23	34	27	27	32	143
Customer 9	24	29	28	26	34	141
Customer 10	26	34	26	27	32	145
Customer 11	28	35	28	28	35	154
Customer 12	28	35	25	28	35	151
Customer 13	28	35	25	27	32	147
Customer 14	26	34	26	27	31	144
Customer 15	28	35	28	28	35	154
Customer 16	27	35	26	28	32	148
Customer 17	28	35	28	28	35	154
Customer 18	27	34	28	28	35	152
Customer 19	28	35	28	28	35	154
Customer 20	25	35	28	28	32	148
Customer 21	24	31	24	24	30	133

Table I17: Perception Sub-Total Scores for Customers at Dealership E

DEALERSHIP E						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	27	35	27	28	35	152
Customer 2	24	32	27	24	33	140
Customer 3	17	32	20	23	31	123
Customer 4	19	30	24	23	29	125
Customer 5	23	30	24	24	30	131
Customer 6	22	29	24	25	30	130
Customer 7	23	32	27	28	34	144
Customer 8	23	29	25	24	31	132
Customer 9	24	28	26	28	32	138
Customer 10	22	31	24	24	28	129
Customer 11	28	35	28	28	35	154
Customer 12	28	34	25	28	32	147
Customer 13	23	31	21	26	30	131
Customer 14	19	28	23	23	29	122
Customer 15	28	35	28	28	35	154
Customer 16	26	33	27	27	34	147
Customer 17	28	35	28	28	35	154
Customer 18	28	35	28	28	35	154
Customer 19	28	35	28	28	35	154
Customer 20	-	-	-	-	-	-
Customer 21	-	-	-	-	-	-

Table I18: SERVQUAL Calculated Scores for Customers at Dealership E

DEALERSHIP E							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.75	0.00	-0.25	0.00	0.00	0.10	0.06
Customer 2	-0.25	-0.20	0.75	-0.75	0.60	0.03	0.06
Customer 3	-1.50	0.40	-1.50	-0.25	0.20	-0.53	0.06
Customer 4	-0.25	0.40	0.50	0.00	0.20	0.17	0.22
Customer 5	0.50	-0.40	1.00	1.00	-0.80	0.26	0.35
Customer 6	-0.25	-1.00	-0.75	0.00	-0.60	-0.52	-0.54
Customer 7	0.00	-0.60	0.00	0.00	-0.20	-0.16	-0.37
Customer 8	0.00	-1.00	-0.50	-0.75	-0.20	-0.49	-0.68
Customer 9	0.00	-0.20	-0.50	0.50	-0.40	-0.12	-0.22
Customer 10	-1.00	-0.60	-0.50	-0.75	-0.80	-0.73	-0.74
Customer 11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 12	0.00	-0.20	0.00	0.00	-0.60	-0.16	-0.12
Customer 13	-1.25	-0.80	-1.00	-0.25	-0.40	-0.74	-0.74
Customer 14	-1.75	-1.20	-0.75	-1.00	-0.40	-1.02	-1.01
Customer 15	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 16	-0.25	-0.40	0.25	-0.25	0.40	-0.05	-0.15
Customer 17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 18	0.25	0.20	0.00	0.00	0.00	0.09	0.09
Customer 19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 20	-	-	-	-	-	-	-
Customer 21	-	-	-	-	-	-	-
Average	-0.26	-0.29	-0.17	-0.13	-0.16	-0.20	-0.20

Table I19: SERVPERF Calculated Scores for Customers at Dealership E

DEALERSHIP E							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.75	7.00	6.75	7.00	7.00	6.90	6.96
Customer 2	6.00	6.40	6.75	6.00	6.60	6.35	6.36
Customer 3	4.25	6.40	5.00	5.75	6.20	5.52	6.10
Customer 4	4.75	6.00	6.00	5.75	5.80	5.66	5.74
Customer 5	5.75	6.00	6.00	6.00	6.00	5.95	5.98
Customer 6	5.50	5.80	6.00	6.25	6.00	5.91	5.94
Customer 7	5.75	6.40	6.75	7.00	6.80	6.54	6.53
Customer 8	5.75	5.80	6.25	6.00	6.20	6.00	5.94
Customer 9	6.00	5.60	6.50	7.00	6.40	6.30	6.13
Customer 10	5.50	6.20	6.00	6.00	5.60	5.86	5.83
Customer 11	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 12	7.00	6.80	6.25	7.00	6.40	6.69	6.66
Customer 13	5.75	6.20	5.25	6.50	6.00	5.94	5.98
Customer 14	4.75	5.60	5.75	5.75	5.80	5.53	5.53
Customer 15	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 16	6.50	6.60	6.75	6.75	6.80	6.68	6.65
Customer 17	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 18	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 19	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 20	-	-	-	-	-	-	-
Customer 21	-	-	-	-	-	-	-
Average	6.05	6.41	6.37	6.51	6.45	6.36	6.38

Table I20: Cronbach Alpha Scores for Customers at Dealership E

DEALERSHIP E					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.72	0.80	0.77	0.84	0.77
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.88	0.81	0.79	0.84	0.69

Table I21: Expectation Sub-Total Scores for Customers at Dealership F

DEALERSHIP F						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	23	31	25	28	35	142
Customer 2	23	33	23	24	29	132
Customer 3	21	29	23	24	30	127
Customer 4	24	31	27	23	26	131
Customer 5	25	33	25	27	32	142
Customer 6	23	28	22	26	32	131
Customer 7	20	34	27	26	31	138
Customer 8	27	35	27	26	34	149
Customer 9	24	35	26	26	27	138
Customer 10	23	29	22	25	34	133
Customer 11	24	35	28	28	35	150
Customer 12	23	33	28	26	33	143
Customer 13	25	29	27	21	30	132
Customer 14	28	35	28	28	31	150
Customer 15	19	35	25	26	31	136
Customer 16	22	29	22	24	29	126
Customer 17	28	35	28	28	34	153
Customer 18	25	29	25	22	28	129
Customer 19	28	35	28	28	35	154

Table I22: Perception Sub-Total Scores for Customers at Dealership F

DEALERSHIP F						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	25	34	28	27	33	147
Customer 2	21	27	24	19	28	119
Customer 3	20	29	23	23	30	125
Customer 4	22	29	27	20	28	126
Customer 5	27	33	27	27	35	149
Customer 6	19	28	23	22	28	120
Customer 7	22	24	20	19	25	110
Customer 8	28	33	27	28	35	151
Customer 9	23	30	17	18	27	115
Customer 10	26	34	26	27	33	146
Customer 11	11	9	6	10	5	41
Customer 12	23	9	16	18	27	93
Customer 13	28	27	24	23	30	132
Customer 14	25	25	23	21	26	120
Customer 15	25	32	26	25	32	140
Customer 16	-	-	-	-	-	-
Customer 17	-	-	-	-	-	-
Customer 18	-	-	-	-	-	-
Customer 19	-	-	-	-	-	-

Table I23: SERVQUAL Calculated Scores for Customers at Dealership F

DEALERSHIP F							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.50	0.60	0.75	-0.25	-0.40	0.24	0.65
Customer 2	-0.50	-1.20	0.25	-1.25	-0.20	-0.58	-0.91
Customer 3	-0.25	0.00	0.00	-0.25	0.00	-0.10	-0.14
Customer 4	-0.50	-0.40	0.00	-0.75	0.40	-0.25	-0.31
Customer 5	0.50	0.00	0.50	0.00	0.60	0.32	0.22
Customer 6	-1.00	0.00	0.25	-1.00	-0.80	-0.51	-0.58
Customer 7	0.50	-2.00	-1.75	-1.75	-1.20	-1.24	-1.49
Customer 8	0.25	-0.40	0.00	0.50	0.20	0.11	-0.11
Customer 9	-0.25	-1.00	-2.25	-2.00	0.00	-1.10	-1.18
Customer 10	0.75	1.00	1.00	0.50	-0.20	0.61	0.78
Customer 11	-3.25	-5.20	-5.50	-4.50	-6.00	-4.89	-5.11
Customer 12	0.00	-4.80	-3.00	-2.00	-1.20	-2.20	-3.28
Customer 13	0.75	-0.40	-0.75	0.50	0.00	0.02	-0.23
Customer 14	-0.75	-2.00	-1.25	-1.75	-1.00	-1.35	-1.78
Customer 15	1.50	-0.60	0.25	-0.25	0.20	0.22	0.22
Customer 16	-	-	-	-	-	-	-
Customer 17	-	-	-	-	-	-	-
Customer 18	-	-	-	-	-	-	-
Customer 19	-	-	-	-	-	-	-
Average	-0.12	-1.09	-0.77	-0.95	-0.64	-0.71	-0.88

Table I24: SERVPERF Calculated Scores for Customers at Dealership F

DEALERSHIP F							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.25	6.80	7.00	6.75	6.60	6.68	6.86
Customer 2	5.25	5.40	6.00	4.75	5.60	5.40	5.21
Customer 3	5.00	5.80	5.75	5.75	6.00	5.66	5.50
Customer 4	5.50	5.80	6.75	5.00	5.60	5.73	5.91
Customer 5	6.75	6.60	6.75	6.75	7.00	6.77	6.77
Customer 6	4.75	5.60	5.75	5.50	5.60	5.44	5.52
Customer 7	5.50	4.80	5.00	4.75	5.00	5.01	4.94
Customer 8	7.00	6.60	6.75	7.00	7.00	6.87	6.75
Customer 9	5.75	6.00	4.25	4.50	5.40	5.18	5.22
Customer 10	6.50	6.80	6.50	6.75	6.60	6.63	6.69
Customer 11	2.75	1.80	1.50	2.50	1.00	1.91	1.79
Customer 12	5.75	1.80	4.00	4.50	5.40	4.29	3.38
Customer 13	7.00	5.40	6.00	5.75	6.00	6.03	5.78
Customer 14	6.25	5.00	5.75	5.25	5.20	5.49	5.15
Customer 15	6.25	6.40	6.50	6.25	6.40	6.36	6.36
Customer 16	-	-	-	-	-	-	-
Customer 17	-	-	-	-	-	-	-
Customer 18	-	-	-	-	-	-	-
Customer 19	-	-	-	-	-	-	-
Average	5.75	5.37	5.62	5.45	5.63	5.56	5.45

Table I25: Cronbach Alpha Scores for Customers at Dealership F

DEALERSHIP F					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.66	0.75	0.67	0.65	0.76
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.74	0.96	0.95	0.90	0.96

Table I26: Expectation Sub-Total Scores for Customers at Dealership G

DEALERSHIP G						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	19	19	20	23	27	108
Customer 2	28	35	28	28	35	154
Customer 3	20	35	28	28	35	146
Customer 4	26	34	26	28	34	148
Customer 5	22	20	22	24	27	115
Customer 6	24	32	26	25	31	138
Customer 7	27	34	24	23	35	143
Customer 8	28	35	26	27	34	150
Customer 9	28	32	25	26	29	140
Customer 10	24	29	22	23	32	130
Customer 11	25	35	28	28	35	151
Customer 12	21	21	24	22	29	117
Customer 13	26	34	27	27	33	147
Customer 14	24	30	20	24	30	128
Customer 15	25	35	27	27	31	145
Customer 16	25	35	25	28	34	147
Customer 17	27	35	27	28	35	152
Customer 18	25	34	28	28	35	150
Customer 19	27	34	28	28	35	152
Customer 20	25	34	26	27	34	146
Customer 21	28	35	28	28	35	154
Customer 22	22	30	24	24	30	130
Customer 23	28	35	28	27	34	152
Customer 24	28	35	28	28	35	154
Customer 25	20	31	28	28	34	141
Customer 26	28	35	28	28	32	151
Customer 27	25	33	23	26	32	139
Customer 28	26	29	26	28	35	144
Customer 29	26	34	27	28	32	147
Customer 30	24	35	25	28	34	146
Customer 31	22	35	27	28	31	143
Customer 32	28	35	28	28	35	154
Customer 33	24	34	27	27	34	146
Customer 34	23	30	24	25	30	132
Customer 35	18	33	24	26	31	132
Customer 36	19	35	27	28	33	142
Customer 37	27	35	28	28	35	153
Customer 38	24	31	26	26	32	139
Customer 39	23	24	17	19	26	109

Table I27: Perception Sub-Total Scores for Customers at Dealership G

DEALERSHIP G						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	15	22	19	20	22	98
Customer 2	28	35	28	28	35	154
Customer 3	28	35	28	28	35	154
Customer 4	24	34	27	28	35	148
Customer 5	22	32	28	27	33	142
Customer 6	21	25	23	22	30	121
Customer 7	22	28	20	23	22	115
Customer 8	26	31	25	27	33	142
Customer 9	26	24	26	23	30	129
Customer 10	25	31	25	26	32	139
Customer 11	28	35	28	28	35	154
Customer 12	21	20	22	21	26	110
Customer 13	26	32	28	26	33	145
Customer 14	24	28	24	24	30	130
Customer 15	21	29	24	24	26	124
Customer 16	23	28	21	21	29	122
Customer 17	21	27	27	25	32	132
Customer 18	26	28	27	25	31	137
Customer 19	26	34	27	28	35	150
Customer 20	26	34	24	28	33	145
Customer 21	24	16	22	19	22	103
Customer 22	24	27	25	24	30	130
Customer 23	24	25	21	22	26	118
Customer 24	21	13	18	14	25	91
Customer 25	28	35	28	28	34	153
Customer 26	28	35	28	28	35	154
Customer 27	25	31	26	24	29	135
Customer 28	28	29	28	28	35	148
Customer 29	24	30	24	25	29	132
Customer 30	23	28	23	20	25	119
Customer 31	24	30	24	24	30	132
Customer 32	28	35	16	25	30	134
Customer 33	21	23	20	21	26	111
Customer 34	22	30	24	24	29	129
Customer 35	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-
Customer 37	-	-	-	-	-	-
Customer 38	-	-	-	-	-	-
Customer 39	-	-	-	-	-	-

Table I28: SERVQUAL Calculated Scores for Customers at Dealership G

DEALERSHIP G							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	-1.00	0.60	-0.25	-0.75	-1.00	-0.48	-0.57
Customer 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 3	2.00	0.00	0.00	0.00	0.00	0.40	0.20
Customer 4	-0.50	0.00	0.25	0.00	0.20	-0.01	-0.01
Customer 5	0.00	2.40	1.50	0.75	1.20	1.17	1.50
Customer 6	-0.75	-1.40	-0.75	-0.75	-0.20	-0.77	-0.77
Customer 7	-1.25	-1.20	-1.00	0.00	-2.60	-1.21	-1.37
Customer 8	-0.50	-0.80	-0.25	0.00	-0.20	-0.35	-0.69
Customer 9	-0.50	-1.60	0.25	-0.75	0.20	-0.48	-0.77
Customer 10	0.25	0.40	0.75	0.75	0.00	0.43	0.45
Customer 11	0.75	0.00	0.00	0.00	0.00	0.15	0.08
Customer 12	0.00	-0.20	-0.50	-0.25	-0.60	-0.31	-0.37
Customer 13	0.00	-0.40	0.25	-0.25	0.00	-0.08	-0.24
Customer 14	0.00	-0.40	1.00	0.00	0.00	0.12	0.12
Customer 15	-1.00	-1.20	-0.75	-0.75	-1.00	-0.94	-1.03
Customer 16	-0.50	-1.40	-1.00	-1.75	-1.00	-1.13	-1.29
Customer 17	-1.50	-1.60	0.00	-0.75	-0.60	-0.89	-1.14
Customer 18	0.25	-1.20	-0.25	-0.75	-0.80	-0.55	-0.55
Customer 19	-0.25	0.00	-0.25	0.00	0.00	-0.10	-0.10
Customer 20	0.25	0.00	-0.50	0.25	-0.20	-0.04	-0.02
Customer 21	-1.00	-3.80	-1.50	-2.25	-2.60	-2.23	-3.40
Customer 22	0.50	-0.60	0.25	0.00	0.00	0.03	-0.40
Customer 23	-1.00	-2.00	-1.75	-1.25	-1.60	-1.52	-1.67
Customer 24	-1.75	-4.40	-2.50	-3.50	-2.00	-2.83	-3.44
Customer 25	2.00	0.80	0.00	0.00	0.00	0.56	0.14
Customer 26	0.00	0.00	0.00	0.00	0.60	0.12	0.12
Customer 27	0.00	-0.40	0.75	-0.50	-0.60	-0.15	-0.21
Customer 28	0.50	0.00	0.50	0.00	0.00	0.20	0.25
Customer 29	-0.50	-0.80	-0.75	-0.75	-0.60	-0.68	-0.68
Customer 30	-0.25	-1.40	-0.50	-2.00	-1.80	-1.19	-1.27
Customer 31	0.50	-1.00	-0.75	-1.00	-0.20	-0.49	-0.75
Customer 32	0.00	0.00	-3.00	-0.75	-1.00	-0.95	-0.71
Customer 33	-0.75	-2.20	-1.75	-1.50	-1.60	-1.56	-1.71
Customer 34	-0.25	0.00	0.00	-0.25	-0.20	-0.14	-0.16
Customer 35	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-
Customer 37	-	-	-	-	-	-	-
Customer 38	-	-	-	-	-	-	-
Customer 39	-	-	-	-	-	-	-
Average	-0.18	-0.70	-0.37	-0.55	-0.54	-0.47	-0.60

Table I29: SERVPERF Calculated Scores for Customers at Dealership G

DEALERSHIP G							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	3.75	4.40	4.75	5.00	4.40	4.46	4.53
Customer 2	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 3	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 4	6.00	6.80	6.75	7.00	7.00	6.71	6.76
Customer 5	5.50	6.40	7.00	6.75	6.60	6.45	6.48
Customer 6	5.25	5.00	5.75	5.50	6.00	5.50	5.50
Customer 7	5.50	5.60	5.00	5.75	4.40	5.25	5.19
Customer 8	6.50	6.20	6.25	6.75	6.60	6.46	6.27
Customer 9	6.50	4.80	6.50	5.75	6.00	5.91	5.62
Customer 10	6.25	6.20	6.25	6.50	6.40	6.32	6.34
Customer 11	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 12	5.25	4.00	5.50	5.25	5.20	5.04	5.05
Customer 13	6.50	6.40	7.00	6.50	6.60	6.60	6.50
Customer 14	6.00	5.60	6.00	6.00	6.00	5.92	5.92
Customer 15	5.25	5.80	6.00	6.00	5.20	5.65	5.74
Customer 16	5.75	5.60	5.25	5.25	5.80	5.53	5.51
Customer 17	5.25	5.40	6.75	6.25	6.40	6.01	5.80
Customer 18	6.50	5.60	6.75	6.25	6.20	6.26	6.26
Customer 19	6.50	6.80	6.75	7.00	7.00	6.81	6.81
Customer 20	6.50	6.80	6.00	7.00	6.60	6.58	6.69
Customer 21	6.00	3.20	5.50	4.75	4.40	4.77	3.60
Customer 22	6.00	5.40	6.25	6.00	6.00	5.93	5.58
Customer 23	6.00	5.00	5.25	5.50	5.20	5.39	5.27
Customer 24	5.25	2.60	4.50	3.50	5.00	4.17	3.56
Customer 25	7.00	7.00	7.00	7.00	6.80	6.96	6.90
Customer 26	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 27	6.25	6.20	6.50	6.00	5.80	6.15	6.17
Customer 28	7.00	5.80	7.00	7.00	7.00	6.76	6.46
Customer 29	6.00	6.00	6.00	6.25	5.80	6.01	6.04
Customer 30	5.75	5.60	5.75	5.00	5.00	5.42	5.41
Customer 31	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Customer 32	7.00	7.00	4.00	6.25	6.00	6.05	6.29
Customer 33	5.25	4.60	5.00	5.25	5.20	5.06	5.00
Customer 34	5.50	6.00	6.00	6.00	5.80	5.86	5.95
Customer 35	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-
Customer 37	-	-	-	-	-	-	-
Customer 38	-	-	-	-	-	-	-
Customer 39	-	-	-	-	-	-	-
Average	6.05	5.76	6.09	6.09	6.01	6.00	5.92

Table I30: Cronbach Alpha Scores for Customers at Dealership G

DEALERSHIP G					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.73	0.92	0.76	0.80	0.78
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.77	0.90	0.82	0.86	0.80

Table I31: Expectation Sub-Total Scores for Customers at Dealership H

DEALERSHIP H						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	27	35	28	28	33	151
Customer 2	20	34	26	26	27	133
Customer 3	28	35	28	28	35	154
Customer 4	19	31	24	24	30	128
Customer 5	24	34	25	26	33	142
Customer 6	20	34	24	27	31	136
Customer 7	22	28	26	27	34	137
Customer 8	25	33	25	24	27	134
Customer 9	28	35	28	28	35	154
Customer 10	23	35	27	27	33	145
Customer 11	25	33	27	28	31	144
Customer 12	26	33	25	26	33	143
Customer 13	24	35	26	28	32	145
Customer 14	25	34	27	28	33	147
Customer 15	25	28	20	20	29	122
Customer 16	25	34	26	27	33	145
Customer 17	22	35	28	28	35	148
Customer 18	28	35	28	28	35	154
Customer 19	28	35	27	28	35	153
Customer 20	25	33	25	27	35	145
Customer 21	28	35	28	28	35	154
Customer 22	26	35	20	28	35	144
Customer 23	18	19	20	24	30	111
Customer 24	28	25	28	28	35	144
Customer 25	28	32	28	28	35	151
Customer 26	19	24	23	22	29	117

Table I32: Perception Sub-Total Scores for Customers at Dealership H

DEALERSHIP H						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	35	26	24	30	139
Customer 2	20	19	21	18	21	99
Customer 3	28	35	28	28	35	154
Customer 4	21	31	26	25	32	135
Customer 5	18	23	23	24	30	118
Customer 6	19	27	22	22	27	117
Customer 7	20	25	22	18	31	116
Customer 8	23	32	24	25	29	133
Customer 9	23	33	28	27	29	140
Customer 10	14	20	23	17	20	94
Customer 11	25	33	27	27	30	142
Customer 12	28	33	26	25	28	140
Customer 13	26	27	24	24	30	131
Customer 14	21	31	24	24	29	129
Customer 15	28	31	22	24	31	136
Customer 16	20	15	18	23	21	97
Customer 17	24	26	24	20	26	120
Customer 18	28	35	28	28	35	154
Customer 19	18	25	24	20	29	116
Customer 20	26	35	27	26	33	147
Customer 21	28	35	28	28	35	154
Customer 22	22	30	25	24	34	135
Customer 23	18	13	11	16	20	78
Customer 24	-	-	-	-	-	-
Customer 25	-	-	-	-	-	-
Customer 26	-	-	-	-	-	-

Table I33: SERVQUAL Calculated Scores for Customers at Dealership H

DEALERSHIP H							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	-0.75	0.00	-0.50	-1.00	-0.60	-0.57	-0.39
Customer 2	0.00	-3.00	-1.25	-2.00	-1.20	-1.49	-1.28
Customer 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 4	0.50	0.00	0.50	0.25	0.40	0.33	0.33
Customer 5	-1.50	-2.20	-0.50	-0.50	-0.60	-1.06	-1.46
Customer 6	-0.25	-1.40	-0.50	-1.25	-0.80	-0.84	-0.94
Customer 7	-0.50	-0.60	-1.00	-2.25	-0.60	-0.99	-0.80
Customer 8	-0.50	-0.20	-0.25	0.25	0.40	-0.06	-0.10
Customer 9	-1.25	-0.40	0.00	-0.25	-1.20	-0.62	-0.47
Customer 10	-2.25	-3.00	-1.00	-2.50	-2.60	-2.27	-2.25
Customer 11	0.00	0.00	0.00	-0.25	-0.20	-0.09	-0.09
Customer 12	0.50	0.00	0.25	-0.25	-1.00	-0.10	-0.10
Customer 13	0.50	-1.60	-0.50	-1.00	-0.40	-0.60	-1.50
Customer 14	-1.00	-0.60	-0.75	-1.00	-0.80	-0.83	-0.84
Customer 15	0.75	0.60	0.50	1.00	0.40	0.65	0.66
Customer 16	-1.25	-3.80	-2.00	-1.00	-2.40	-2.09	-2.53
Customer 17	0.50	-1.80	-1.00	-2.00	-1.80	-1.22	-1.40
Customer 18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 19	-2.50	-2.00	-0.75	-2.00	-1.20	-1.69	-1.67
Customer 20	0.25	0.40	0.50	-0.25	-0.40	0.10	0.04
Customer 21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 22	-1.00	-1.00	1.25	-1.00	-0.20	-0.39	-0.70
Customer 23	0.00	-1.20	-2.25	-2.00	-2.00	-1.49	-1.37
Customer 24	-	-	-	-	-	-	-
Customer 25	-	-	-	-	-	-	-
Customer 26	-	-	-	-	-	-	-
Average	-0.42	-0.95	-0.40	-0.83	-0.73	-0.67	-0.73

Table I34: SERVPERF Calculated Scores for Customers at Dealership H

DEALERSHIP H							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.00	7.00	6.50	6.00	6.00	6.30	6.55
Customer 2	5.00	3.80	5.25	4.50	4.20	4.55	4.60
Customer 3	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 4	5.25	6.20	6.50	6.25	6.40	6.12	6.12
Customer 5	4.50	4.60	5.75	6.00	6.00	5.37	5.13
Customer 6	4.75	5.40	5.50	5.50	5.40	5.31	5.39
Customer 7	5.00	5.00	5.50	4.50	6.20	5.24	5.12
Customer 8	5.75	6.40	6.00	6.25	5.80	6.04	6.14
Customer 9	5.75	6.60	7.00	6.75	5.80	6.38	6.53
Customer 10	3.50	4.00	5.75	4.25	4.00	4.30	4.41
Customer 11	6.25	6.60	6.75	6.75	6.00	6.47	6.47
Customer 12	7.00	6.60	6.50	6.25	5.60	6.39	6.39
Customer 13	6.50	5.40	6.00	6.00	6.00	5.98	5.47
Customer 14	5.25	6.20	6.00	6.00	5.80	5.85	5.82
Customer 15	7.00	6.20	5.50	6.00	6.20	6.18	6.25
Customer 16	5.00	3.00	4.50	5.75	4.20	4.49	4.14
Customer 17	6.00	5.20	6.00	5.00	5.20	5.48	5.45
Customer 18	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 19	4.50	5.00	6.00	5.00	5.80	5.26	5.27
Customer 20	6.50	7.00	6.75	6.50	6.60	6.67	6.65
Customer 21	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 22	5.50	6.00	6.25	6.00	6.80	6.11	6.01
Customer 23	4.50	2.60	2.75	4.00	4.00	3.57	3.76
Customer 24	-	-	-	-	-	-	-
Customer 25	-	-	-	-	-	-	-
Customer 26	-	-	-	-	-	-	-
Average	5.67	5.64	5.99	5.84	5.78	5.79	5.77

Table I35: Cronbach Alpha Scores for Customers at Dealership H

DEALERSHIP H					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.86	0.83	0.77	0.83	0.82
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.84	0.95	0.88	0.92	0.85

Table I36: Expectation Sub-Total Scores for Customers at Dealership I

DEALERSHIP I						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	28	23	24	27	126
Customer 2	28	35	28	27	35	153
Customer 3	20	33	26	27	32	138
Customer 4	25	35	28	28	35	151
Customer 5	24	30	24	24	30	132
Customer 6	25	30	26	24	35	140
Customer 7	20	30	24	24	30	128
Customer 8	21	32	24	25	29	131
Customer 9	25	35	27	28	34	149
Customer 10	20	29	24	24	30	127
Customer 11	23	33	28	28	35	147
Customer 12	28	35	28	28	34	153
Customer 13	26	32	28	26	34	146
Customer 14	28	35	28	28	35	154
Customer 15	24	35	28	28	35	150
Customer 16	26	35	28	28	34	151
Customer 17	22	35	28	28	35	148
Customer 18	24	35	27	25	34	145
Customer 19	23	30	24	26	33	136
Customer 20	24	35	27	28	32	146
Customer 21	23	32	26	24	26	131
Customer 22	23	30	24	24	29	130
Customer 23	28	35	28	28	35	154
Customer 24	26	33	26	28	31	144
Customer 25	19	35	28	28	35	145
Customer 26	23	30	24	27	30	134
Customer 27	28	35	28	25	33	149

Customer 28	28	35	28	28	35	154
Customer 29	26	35	28	28	35	152
Customer 30	23	35	28	28	34	148
Customer 31	15	26	24	23	31	119
Customer 32	28	33	28	28	35	152
Customer 33	26	35	25	27	33	146
Customer 34	26	35	28	28	35	152
Customer 35	19	22	19	22	22	104
Customer 36	25	34	28	27	35	149
Customer 37	22	31	24	25	33	135
Customer 38	28	35	28	28	34	153
Customer 39	23	31	25	26	35	140
Customer 40	22	27	19	26	26	120
Customer 41	21	25	20	20	24	110
Customer 42	19	34	24	25	29	131
Customer 43	28	35	28	28	35	154
Customer 44	27	35	28	28	35	153
Customer 45	23	35	24	28	34	144
Customer 46	28	34	28	28	35	153
Customer 47	28	35	28	28	34	153
Customer 48	25	34	27	28	33	147
Customer 49	24	29	24	24	30	131
Customer 50	20	35	28	28	35	146
Customer 51	24	30	24	24	30	132
Customer 52	26	32	26	28	35	147
Customer 53	22	31	27	22	30	132
Customer 54	19	29	24	23	33	128
Customer 55	24	34	27	26	33	144
Customer 56	26	33	25	27	29	140

Table I37: Perception Sub-Total Scores for Customers at Dealership I

DEALERSHIP I						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	24	30	24	24	30	132
Customer 2	26	31	27	28	32	144
Customer 3	25	29	26	25	31	136
Customer 4	25	35	28	28	35	151
Customer 5	24	30	24	24	30	132
Customer 6	28	35	28	28	35	154
Customer 7	20	25	20	20	23	108
Customer 8	22	27	24	24	27	124
Customer 9	22	31	24	24	31	132
Customer 10	26	23	24	20	30	123
Customer 11	20	30	26	26	31	133
Customer 12	24	26	21	24	27	122
Customer 13	26	35	27	28	34	150
Customer 14	24	30	25	27	30	136
Customer 15	22	26	23	25	30	126
Customer 16	26	33	27	27	35	148
Customer 17	25	30	25	24	29	133
Customer 18	22	22	19	21	27	111
Customer 19	21	27	22	22	26	118
Customer 20	24	28	24	24	30	130
Customer 21	22	30	23	26	28	129
Customer 22	23	30	24	24	28	129
Customer 23	26	29	28	28	33	144
Customer 24	23	23	24	22	22	114
Customer 25	20	15	13	15	19	82
Customer 26	22	27	24	23	30	126
Customer 27	23	29	24	24	31	131
Customer 28	22	21	26	25	29	123
Customer 29	28	35	28	28	35	154
Customer 30	25	34	28	28	34	149
Customer 31	25	30	21	22	28	126
Customer 32	28	35	28	28	35	154
Customer 33	25	33	23	28	32	141
Customer 34	27	35	26	28	33	149
Customer 35	24	32	24	20	29	129
Customer 36	25	35	28	28	35	151
Customer 37	21	35	25	27	29	137

Customer 38	21	30	26	28	34	139
Customer 39	25	29	24	24	35	137
Customer 40	25	34	23	25	27	134
Customer 41	18	30	20	22	29	119
Customer 42	14	27	22	26	27	116
Customer 43	27	34	26	24	32	143
Customer 44	25	32	28	27	33	145
Customer 45	22	29	25	24	31	131
Customer 46	28	33	28	28	35	152
Customer 47	28	30	26	25	31	140
Customer 48	25	35	25	28	29	142
Customer 49	20	27	24	23	30	124
Customer 50	24	34	28	28	35	149
Customer 51	24	30	24	24	30	132
Customer 52	24	32	26	24	32	138
Customer 53	21	33	25	24	33	136
Customer 54	22	30	24	24	35	135
Customer 55	-	-	-	-	-	-
Customer 56	-	-	-	-	-	-

Table I38: SERVQUAL Calculated Scores for Customers at Dealership I

DEALERSHIP I							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.00	0.40	0.25	0.00	0.60	0.25	0.25
Customer 2	-0.50	-0.80	-0.25	0.25	-0.60	-0.38	-0.62
Customer 3	1.25	-0.80	0.00	-0.50	-0.20	-0.05	-0.32
Customer 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 6	0.75	1.00	0.50	1.00	0.00	0.65	0.65
Customer 7	0.00	-1.00	-1.00	-1.00	-1.40	-0.88	-0.84
Customer 8	0.25	-1.00	0.00	-0.25	-0.40	-0.28	-0.48
Customer 9	-0.75	-0.80	-0.75	-1.00	-0.60	-0.78	-0.78
Customer 10	1.50	-1.20	0.00	-1.00	0.00	-0.14	-0.55
Customer 11	-0.75	-0.60	-0.50	-0.50	-0.80	-0.63	-0.60
Customer 12	-1.00	-1.80	-1.75	-1.00	-1.40	-1.39	-1.59
Customer 13	0.00	0.60	-0.25	0.50	0.00	0.17	0.12
Customer 14	-1.00	-1.00	-0.75	-0.25	-1.00	-0.80	-0.85
Customer 15	-0.50	-1.80	-1.25	-0.75	-1.00	-1.06	-1.38
Customer 16	0.00	-0.40	-0.25	-0.25	0.20	-0.14	-0.23
Customer 17	0.75	-1.00	-0.75	-1.00	-1.20	-0.64	-0.80
Customer 18	-0.50	-2.60	-2.00	-1.00	-1.40	-1.50	-1.81
Customer 19	-0.50	-0.60	-0.50	-1.00	-1.40	-0.80	-0.73
Customer 20	0.00	-1.40	-0.75	-1.00	-0.40	-0.71	-0.86
Customer 21	-0.25	-0.40	-0.75	0.50	0.40	-0.10	-0.20
Customer 22	0.00	0.00	0.00	0.00	-0.20	-0.04	-0.04
Customer 23	-0.50	-1.20	0.00	0.00	-0.40	-0.42	-1.01
Customer 24	-0.75	-2.00	-0.50	-1.50	-1.80	-1.31	-1.66
Customer 25	0.25	-4.00	-3.75	-3.25	-3.20	-2.79	-3.70
Customer 26	-0.25	-0.60	0.00	-1.00	0.00	-0.37	-0.42
Customer 27	-1.25	-1.20	-1.00	-0.25	-0.40	-0.82	-1.01
Customer 28	-1.50	-2.80	-0.50	-0.75	-1.20	-1.35	-1.35
Customer 29	0.50	0.00	0.00	0.00	0.00	0.10	0.10
Customer 30	0.50	-0.20	0.00	0.00	0.00	0.06	-0.01
Customer 31	2.50	0.80	-0.75	-0.25	-0.60	0.34	0.53
Customer 32	0.00	0.40	0.00	0.00	0.00	0.08	0.24
Customer 33	-0.25	-0.40	-0.50	0.25	-0.20	-0.22	-0.19
Customer 34	0.25	0.00	-0.50	0.00	-0.40	-0.13	-0.12
Customer 35	1.25	2.00	1.25	-0.50	1.40	1.08	1.24
Customer 36	0.00	0.20	0.00	0.25	0.00	0.09	0.15

Customer 37	-0.25	0.80	0.25	0.50	-0.80	0.10	0.64
Customer 38	-1.75	-1.00	-0.50	0.00	0.00	-0.65	-0.65
Customer 39	0.50	-0.40	-0.25	-0.50	0.00	-0.13	-0.23
Customer 40	0.75	1.40	1.00	-0.25	0.20	0.62	0.87
Customer 41	-0.75	1.00	0.00	0.50	1.00	0.35	0.45
Customer 42	-1.25	-1.40	-0.50	0.25	-0.40	-0.66	-0.74
Customer 43	-0.25	-0.20	-0.50	-1.00	-0.60	-0.51	-0.51
Customer 44	-0.50	-0.60	0.00	-0.25	-0.40	-0.35	-0.43
Customer 45	-0.25	-1.20	0.25	-1.00	-0.60	-0.56	-0.64
Customer 46	0.00	-0.20	0.00	0.00	0.00	-0.04	-0.04
Customer 47	0.00	-1.00	-0.50	-0.75	-0.60	-0.57	-0.59
Customer 48	0.00	0.20	-0.50	0.00	-0.80	-0.22	-0.17
Customer 49	-1.00	-0.40	0.00	-0.25	0.00	-0.33	-0.29
Customer 50	1.00	-0.20	0.00	0.00	0.00	0.16	0.02
Customer 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 52	-0.50	0.00	0.00	-1.00	-0.60	-0.42	-0.29
Customer 53	-0.25	0.40	-0.50	0.50	0.60	0.15	0.04
Customer 54	0.75	0.20	0.00	0.25	0.40	0.32	0.30
Customer 55	-	-	-	-	-	-	-
Customer 56	-	-	-	-	-	-	-
Average	-0.08	-0.50	-0.35	-0.34	-0.37	-0.33	-0.39

Table I39: SERVPERF Calculated Scores for Customers at Dealership I

DEALERSHIP I							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Customer 2	6.50	6.20	6.75	7.00	6.40	6.57	6.36
Customer 3	6.25	5.80	6.50	6.25	6.20	6.20	6.12
Customer 4	6.25	7.00	7.00	7.00	7.00	6.85	6.96
Customer 5	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Customer 6	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 7	5.00	5.00	5.00	5.00	4.60	4.92	4.96
Customer 8	5.50	5.40	6.00	6.00	5.40	5.66	5.59
Customer 9	5.50	6.20	6.00	6.00	6.20	5.98	5.89
Customer 10	6.50	4.60	6.00	5.00	6.00	5.62	5.25
Customer 11	5.00	6.00	6.50	6.50	6.20	6.04	6.30
Customer 12	6.00	5.20	5.25	6.00	5.40	5.57	5.39
Customer 13	6.50	7.00	6.75	7.00	6.80	6.81	6.73
Customer 14	6.00	6.00	6.25	6.75	6.00	6.20	6.15
Customer 15	5.50	5.20	5.75	6.25	6.00	5.74	5.53
Customer 16	6.50	6.60	6.75	6.75	7.00	6.72	6.65
Customer 17	6.25	6.00	6.25	6.00	5.80	6.06	6.06
Customer 18	5.50	4.40	4.75	5.25	5.40	5.06	4.90
Customer 19	5.25	5.40	5.50	5.50	5.20	5.37	5.41
Customer 20	6.00	5.60	6.00	6.00	6.00	5.92	5.86
Customer 21	5.50	6.00	5.75	6.50	5.60	5.87	5.96
Customer 22	5.75	6.00	6.00	6.00	5.60	5.87	5.87
Customer 23	6.50	5.80	7.00	7.00	6.60	6.58	6.00
Customer 24	5.75	4.60	6.00	5.50	4.40	5.25	4.93
Customer 25	5.00	3.00	3.25	3.75	3.80	3.76	3.19
Customer 26	5.50	5.40	6.00	5.75	6.00	5.73	5.70
Customer 27	5.75	5.80	6.00	6.00	6.20	5.95	5.88
Customer 28	5.50	4.20	6.50	6.25	5.80	5.65	5.65
Customer 29	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 30	6.25	6.80	7.00	7.00	6.80	6.77	6.81
Customer 31	6.25	6.00	5.25	5.50	5.60	5.72	5.76
Customer 32	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 33	6.25	6.60	5.75	7.00	6.40	6.40	6.38
Customer 34	6.75	7.00	6.50	7.00	6.60	6.77	6.79
Customer 35	6.00	6.40	6.00	5.00	5.80	5.84	5.96
Customer 36	6.25	7.00	7.00	7.00	7.00	6.85	6.96

Customer 37	5.25	7.00	6.25	6.75	5.80	6.21	6.83
Customer 38	5.25	6.00	6.50	7.00	6.80	6.31	6.31
Customer 39	6.25	5.80	6.00	6.00	7.00	6.21	6.21
Customer 40	6.25	6.80	5.75	6.25	5.40	6.09	6.26
Customer 41	4.50	6.00	5.00	5.50	5.80	5.36	5.45
Customer 42	3.50	5.40	5.50	6.50	5.40	5.26	5.55
Customer 43	6.75	6.80	6.50	6.00	6.40	6.49	6.49
Customer 44	6.25	6.40	7.00	6.75	6.60	6.60	6.56
Customer 45	5.50	5.80	6.25	6.00	6.20	5.95	6.00
Customer 46	7.00	6.60	7.00	7.00	7.00	6.92	6.92
Customer 47	7.00	6.00	6.50	6.25	6.20	6.39	6.38
Customer 48	6.25	7.00	6.25	7.00	5.80	6.46	6.51
Customer 49	5.00	5.40	6.00	5.75	6.00	5.63	5.61
Customer 50	6.00	6.80	7.00	7.00	7.00	6.76	6.82
Customer 51	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Customer 52	6.00	6.40	6.50	6.00	6.40	6.26	6.29
Customer 53	5.25	6.60	6.25	6.00	6.60	6.14	6.11
Customer 54	5.50	6.00	6.00	6.00	7.00	6.10	6.00
Customer 55	-	-	-	-	-	-	-
Customer 56	-	-	-	-	-	-	-
Average	5.92	6.00	6.15	6.23	6.11	6.08	6.06

Table I40: Cronbach Alpha Scores for Customers at Dealership I

DEALERSHIP I					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.79	0.89	0.88	0.86	0.90
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.80	0.89	0.86	0.92	0.87

Table I41: Expectation Sub-Total Scores for Customers at Dealership J

DEALERSHIP J						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	26	35	28	28	35	152
Customer 2	28	35	27	27	35	152
Customer 3	22	34	25	28	32	141
Customer 4	25	21	17	21	25	109
Customer 5	21	33	22	22	24	122
Customer 6	21	30	23	24	31	129
Customer 7	19	34	27	27	32	139
Customer 8	5	9	6	7	6	33
Customer 9	28	35	28	28	35	154
Customer 10	20	28	22	23	27	120
Customer 11	28	34	26	26	33	147
Customer 12	27	35	26	27	31	146
Customer 13	27	35	28	28	35	153
Customer 14	25	34	25	23	31	138
Customer 15	22	32	27	26	29	136
Customer 16	24	35	28	28	34	149
Customer 17	22	30	23	24	29	128
Customer 18	24	30	26	27	35	142
Customer 19	25	33	27	26	32	143
Customer 20	23	35	26	28	35	147
Customer 21	28	35	28	28	35	154
Customer 22	26	35	28	27	32	148
Customer 23	23	35	28	28	35	149
Customer 24	22	33	25	28	33	141
Customer 25	17	35	28	28	35	143
Customer 26	24	35	28	26	34	147
Customer 27	28	31	27	28	34	148
Customer 28	28	35	28	28	35	154
Customer 29	22	25	23	23	29	122
Customer 30	27	31	25	23	29	135
Customer 31	27	30	25	28	33	143
Customer 32	21	30	24	21	30	126
Customer 33	19	32	28	28	35	142
Customer 34	22	21	21	23	30	117
Customer 35	23	34	23	24	32	136
Customer 36	27	35	27	28	35	152
Customer 37	28	31	28	24	35	146

Customer 38	24	34	27	28	31	144
Customer 39	24	35	28	28	34	149
Customer 40	26	35	28	28	35	152
Customer 41	28	35	28	28	35	154
Customer 42	28	32	27	23	30	140
Customer 43	24	35	28	28	35	150
Customer 44	20	35	28	28	35	146
Customer 45	24	20	17	20	21	102
Customer 46	28	35	28	28	35	154
Customer 47	28	34	27	28	32	149
Customer 48	24	33	28	28	35	148
Customer 49	22	34	26	26	28	136
Customer 50	21	18	19	22	27	107
Customer 51	28	35	28	28	35	154
Customer 52	28	35	28	28	35	154
Customer 53	26	35	28	28	35	152
Customer 54	20	29	25	24	30	128
Customer 55	22	32	23	24	23	124
Customer 56	21	30	24	24	30	129
Customer 57	21	35	25	27	29	137
Customer 58	28	35	28	28	35	154
Customer 59	26	29	28	26	31	140
Customer 60	28	35	26	28	35	152
Customer 61	19	32	27	26	33	137
Customer 62	23	35	28	28	35	149
Customer 63	28	30	28	27	31	144
Customer 64	28	35	27	26	29	145
Customer 65	16	32	24	24	29	125
Customer 66	23	33	26	23	31	136
Customer 67	28	35	28	28	35	154
Customer 68	28	35	28	28	33	152

Table I42: Perception Sub-Total Scores for Customers at Dealership J

DEALERSHIP J						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	26	33	26	25	32	142
Customer 2	28	35	27	28	34	152
Customer 3	27	34	28	28	33	150
Customer 4	22	22	19	19	25	107
Customer 5	23	27	19	23	28	120
Customer 6	22	30	23	22	28	125
Customer 7	27	31	26	28	32	144
Customer 8	25	29	26	26	32	138
Customer 9	24	21	21	24	25	115
Customer 10	20	28	23	20	27	118
Customer 11	22	15	18	18	22	95
Customer 12	25	25	22	22	28	122
Customer 13	26	30	27	25	35	143
Customer 14	19	17	18	18	26	98
Customer 15	27	33	26	28	30	144
Customer 16	24	35	25	28	34	146
Customer 17	24	33	25	27	29	138
Customer 18	24	28	26	23	29	130
Customer 19	23	31	23	24	32	133
Customer 20	28	14	26	28	25	121
Customer 21	28	34	28	28	35	153
Customer 22	22	26	22	23	25	118
Customer 23	28	27	24	22	24	125
Customer 24	24	25	22	22	24	117
Customer 25	28	21	20	14	22	105
Customer 26	24	25	19	22	26	116
Customer 27	22	31	28	27	35	143
Customer 28	27	34	28	26	33	148
Customer 29	24	30	24	23	30	131
Customer 30	28	31	25	27	35	146
Customer 31	28	30	24	28	32	142
Customer 32	25	35	27	26	34	147
Customer 33	22	30	28	28	32	140
Customer 34	22	22	19	23	28	114
Customer 35	28	27	26	25	30	136
Customer 36	27	26	24	23	32	132
Customer 37	26	35	28	28	35	152

Customer 38	24	20	14	12	19	89
Customer 39	24	24	22	24	28	122
Customer 40	28	29	28	28	35	148
Customer 41	22	25	24	24	23	118
Customer 42	27	27	23	26	29	132
Customer 43	26	13	19	19	21	98
Customer 44	28	35	28	27	33	151
Customer 45	22	19	19	20	23	103
Customer 46	22	25	21	21	23	112
Customer 47	27	30	24	26	30	137
Customer 48	27	31	26	25	31	140
Customer 49	25	29	20	24	29	127
Customer 50	25	20	21	23	26	115
Customer 51	28	35	28	28	35	154
Customer 52	28	25	23	26	29	131
Customer 53	27	35	28	28	35	153
Customer 54	20	25	22	20	25	112
Customer 55	27	22	22	25	22	118
Customer 56	23	29	22	23	27	124
Customer 57	28	28	23	24	30	133
Customer 58	28	35	28	28	35	154
Customer 59	-	-	-	-	-	-
Customer 60	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-
Customer 64	-	-	-	-	-	-
Customer 65	-	-	-	-	-	-
Customer 66	-	-	-	-	-	-
Customer 67	-	-	-	-	-	-
Customer 68	-	-	-	-	-	-

Table I43: SERVQUAL Calculated Scores for Customers at Dealership J

DEALERSHIP J							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.00	-0.40	-0.50	-0.75	-0.60	-0.45	-0.44
Customer 2	0.00	0.00	0.00	0.25	-0.20	0.01	0.04
Customer 3	1.25	0.00	0.75	0.00	0.20	0.44	0.40
Customer 4	-0.75	0.20	0.50	-0.50	0.00	-0.11	-0.16
Customer 5	0.50	-1.20	-0.75	0.25	0.80	-0.08	-0.30
Customer 6	0.25	0.00	0.00	-0.50	-0.60	-0.17	-0.10
Customer 7	2.00	-0.60	-0.25	0.25	0.00	0.28	-0.05
Customer 8	5.00	4.00	5.00	4.75	5.20	4.79	4.50
Customer 9	-1.00	-2.80	-1.75	-1.00	-2.00	-1.71	-2.15
Customer 10	0.00	0.00	0.25	-0.75	0.00	-0.10	-0.04
Customer 11	-1.50	-3.80	-2.00	-2.00	-2.20	-2.30	-2.55
Customer 12	-0.50	-2.00	-1.00	-1.25	-0.60	-1.07	-1.07
Customer 13	-0.25	-1.00	-0.25	-0.75	0.00	-0.45	-0.66
Customer 14	-1.50	-3.40	-1.75	-1.25	-1.00	-1.78	-2.26
Customer 15	1.25	0.20	-0.25	0.50	0.20	0.38	0.40
Customer 16	0.00	0.00	-0.75	0.00	0.00	-0.15	-0.15
Customer 17	0.50	0.60	0.50	0.75	0.00	0.47	0.51
Customer 18	0.00	-0.40	0.00	-1.00	-1.20	-0.52	-0.41
Customer 19	-0.50	-0.40	-1.00	-0.50	0.00	-0.48	-0.49
Customer 20	1.25	-4.20	0.00	0.00	-2.00	-0.99	-1.76
Customer 21	0.00	-0.20	0.00	0.00	0.00	-0.04	-0.04
Customer 22	-1.00	-1.80	-1.50	-1.00	-1.40	-1.34	-1.46
Customer 23	1.25	-1.60	-1.00	-1.50	-2.20	-1.01	-1.31
Customer 24	0.50	-1.60	-0.75	-1.50	-1.80	-1.03	-0.86
Customer 25	2.75	-2.80	-2.00	-3.50	-2.60	-1.63	-2.77
Customer 26	0.00	-2.00	-2.25	-1.00	-1.60	-1.37	-1.63
Customer 27	-1.50	0.00	0.25	-0.25	0.20	-0.26	-0.28
Customer 28	-0.25	-0.20	0.00	-0.50	-0.40	-0.27	-0.29
Customer 29	0.50	1.00	0.25	0.00	0.20	0.39	0.63
Customer 30	0.25	0.00	0.00	1.00	1.20	0.49	0.31
Customer 31	0.25	0.00	-0.25	0.00	-0.20	-0.04	-0.05
Customer 32	1.00	1.00	0.75	1.25	0.80	0.96	0.96
Customer 33	0.75	-0.40	0.00	0.00	-0.60	-0.05	-0.05
Customer 34	0.00	0.20	-0.50	0.00	-0.40	-0.14	0.04
Customer 35	1.25	-1.40	0.75	0.25	-0.40	0.09	0.12
Customer 36	0.00	-1.80	-0.75	-1.25	-0.60	-0.88	-1.01

Customer 37	-0.50	0.80	0.00	1.00	0.00	0.26	0.56
Customer 38	0.00	-2.80	-3.25	-4.00	-2.40	-2.49	-2.77
Customer 39	0.00	-2.20	-1.50	-1.00	-1.20	-1.18	-1.15
Customer 40	0.50	-1.20	0.00	0.00	0.00	-0.14	-0.56
Customer 41	-1.50	-2.00	-1.00	-1.00	-2.40	-1.58	-1.98
Customer 42	-0.25	-1.00	-1.00	0.75	-0.20	-0.34	-0.72
Customer 43	0.50	-4.40	-2.25	-2.25	-2.80	-2.24	-2.89
Customer 44	2.00	0.00	0.00	-0.25	-0.40	0.27	0.11
Customer 45	-0.50	-0.20	0.50	0.00	0.40	0.04	-0.01
Customer 46	-1.50	-2.00	-1.75	-1.75	-2.40	-1.88	-1.96
Customer 47	-0.25	-0.80	-0.75	-0.50	-0.40	-0.54	-0.66
Customer 48	0.75	-0.40	-0.50	-0.75	-0.80	-0.34	-0.50
Customer 49	0.75	-1.00	-1.50	-0.50	0.20	-0.41	-0.76
Customer 50	1.00	0.40	0.50	0.25	-0.20	0.39	0.45
Customer 51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 52	0.00	-2.00	-1.25	-0.50	-1.20	-0.99	-1.20
Customer 53	0.25	0.00	0.00	0.00	0.00	0.05	0.04
Customer 54	0.00	-0.80	-0.75	-1.00	-1.00	-0.71	-0.67
Customer 55	1.25	-2.00	-0.25	0.25	-0.20	-0.19	-0.58
Customer 56	0.50	-0.20	-0.50	-0.25	-0.60	-0.21	-0.20
Customer 57	1.75	-1.40	-0.50	-0.75	0.20	-0.14	-0.55
Customer 58	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 59	-	-	-	-	-	-	-
Customer 60	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-
Customer 64	-	-	-	-	-	-	-
Customer 65	-	-	-	-	-	-	-
Customer 66	-	-	-	-	-	-	-
Customer 67	-	-	-	-	-	-	-
Customer 68	-	-	-	-	-	-	-
Average	0.28	-0.86	-0.45	-0.41	-0.50	-0.39	-0.52

Table I44: SERVPERF Calculated Scores for Customers at Dealership J

DEALERSHIP J							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.50	6.60	6.50	6.25	6.40	6.45	6.52
Customer 2	7.00	7.00	6.75	7.00	6.80	6.91	6.95
Customer 3	6.75	6.80	7.00	7.00	6.60	6.83	6.87
Customer 4	5.50	4.40	4.75	4.75	5.00	4.88	4.94
Customer 5	5.75	5.40	4.75	5.75	5.60	5.45	5.46
Customer 6	5.50	6.00	5.75	5.50	5.60	5.67	5.90
Customer 7	6.75	6.20	6.50	7.00	6.40	6.57	6.54
Customer 8	6.25	5.80	6.50	6.50	6.40	6.29	6.09
Customer 9	6.00	4.20	5.25	6.00	5.00	5.29	4.85
Customer 10	5.00	5.60	5.75	5.00	5.40	5.35	5.52
Customer 11	5.50	3.00	4.50	4.50	4.40	4.38	4.09
Customer 12	6.25	5.00	5.50	5.50	5.60	5.57	5.57
Customer 13	6.50	6.00	6.75	6.25	7.00	6.50	6.31
Customer 14	4.75	3.40	4.50	4.50	5.20	4.47	4.16
Customer 15	6.75	6.60	6.50	7.00	6.00	6.57	6.60
Customer 16	6.00	7.00	6.25	7.00	6.80	6.61	6.69
Customer 17	6.00	6.60	6.25	6.75	5.80	6.28	6.36
Customer 18	6.00	5.60	6.50	5.75	5.80	5.93	5.83
Customer 19	5.75	6.20	5.75	6.00	6.40	6.02	6.07
Customer 20	7.00	2.80	6.50	7.00	5.00	5.66	5.02
Customer 21	7.00	6.80	7.00	7.00	7.00	6.96	6.96
Customer 22	5.50	5.20	5.50	5.75	5.00	5.39	5.38
Customer 23	7.00	5.40	6.00	5.50	4.80	5.74	5.57
Customer 24	6.00	5.00	5.50	5.50	4.80	5.36	5.44
Customer 25	7.00	4.20	5.00	3.50	4.40	4.82	4.20
Customer 26	6.00	5.00	4.75	5.50	5.20	5.29	5.16
Customer 27	5.50	6.20	7.00	6.75	7.00	6.49	6.45
Customer 28	6.75	6.80	7.00	6.50	6.60	6.73	6.72
Customer 29	6.00	6.00	6.00	5.75	6.00	5.95	5.98
Customer 30	7.00	6.20	6.25	6.75	7.00	6.64	6.49
Customer 31	7.00	6.00	6.00	7.00	6.40	6.48	6.24
Customer 32	6.25	7.00	6.75	6.50	6.80	6.66	6.81
Customer 33	5.50	6.00	7.00	7.00	6.40	6.38	6.38
Customer 34	5.50	4.40	4.75	5.75	5.60	5.20	4.89
Customer 35	7.00	5.40	6.50	6.25	6.00	6.23	6.24
Customer 36	6.75	5.20	6.00	5.75	6.40	6.02	5.90

Customer 37	6.50	7.00	7.00	7.00	7.00	6.90	6.95
Customer 38	6.00	4.00	3.50	3.00	3.80	4.06	3.86
Customer 39	6.00	4.80	5.50	6.00	5.60	5.58	5.63
Customer 40	7.00	5.80	7.00	7.00	7.00	6.76	6.38
Customer 41	5.50	5.00	6.00	6.00	4.60	5.42	5.03
Customer 42	6.75	5.40	5.75	6.50	5.80	6.04	5.82
Customer 43	6.50	2.60	4.75	4.75	4.20	4.56	4.01
Customer 44	7.00	7.00	7.00	6.75	6.60	6.87	6.91
Customer 45	5.50	3.80	4.75	5.00	4.60	4.73	4.36
Customer 46	5.50	5.00	5.25	5.25	4.60	5.12	5.04
Customer 47	6.75	6.00	6.00	6.50	6.00	6.25	6.13
Customer 48	6.75	6.20	6.50	6.25	6.20	6.38	6.27
Customer 49	6.25	5.80	5.00	6.00	5.80	5.77	5.71
Customer 50	6.25	4.00	5.25	5.75	5.20	5.29	5.19
Customer 51	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 52	7.00	5.00	5.75	6.50	5.80	6.01	5.81
Customer 53	6.75	7.00	7.00	7.00	7.00	6.95	6.96
Customer 54	5.00	5.00	5.50	5.00	5.00	5.10	5.10
Customer 55	6.75	4.40	5.50	6.25	4.40	5.46	5.32
Customer 56	5.75	5.80	5.50	5.75	5.40	5.64	5.66
Customer 57	7.00	5.60	5.75	6.00	6.00	6.07	5.92
Customer 58	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 59	-	-	-	-	-	-	-
Customer 60	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-
Customer 64	-	-	-	-	-	-	-
Customer 65	-	-	-	-	-	-	-
Customer 66	-	-	-	-	-	-	-
Customer 67	-	-	-	-	-	-	-
Customer 68	-	-	-	-	-	-	-
Average	6.27	5.52	5.93	6.03	5.81	5.91	5.81

Table I45: Cronbach Alpha Scores for Customers at Dealership J

DEALERSHIP J					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.88	0.94	0.91	0.91	0.93
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.91	0.92	0.88	0.90	0.89

Table I46: Expectation Sub-Total Scores for Customers at Dealership K

DEALERSHIP K						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	28	35	28	28	35	154
Customer 2	28	35	27	28	35	153
Customer 3	27	33	28	28	35	151
Customer 4	28	35	28	28	35	154
Customer 5	24	34	24	28	33	143
Customer 6	17	19	20	18	29	103
Customer 7	27	35	28	28	35	153
Customer 8	24	30	23	25	29	131
Customer 9	24	30	25	28	32	139
Customer 10	25	32	27	22	25	131
Customer 11	26	35	28	28	34	151
Customer 12	23	34	25	28	29	139
Customer 13	25	32	27	24	35	143
Customer 14	28	35	18	28	30	139
Customer 15	23	35	26	28	27	139
Customer 16	19	34	27	26	30	136
Customer 17	28	35	28	28	35	154
Customer 18	23	31	23	24	29	130
Customer 19	19	24	19	20	25	107
Customer 20	26	34	27	28	34	149
Customer 21	19	35	27	28	33	142
Customer 22	22	28	23	23	29	125
Customer 23	19	33	27	24	31	134
Customer 24	26	35	28	28	35	152
Customer 25	28	35	28	28	35	154
Customer 26	24	35	28	28	35	150
Customer 27	28	35	28	28	33	152

Customer 28	22	30	27	28	34	141
Customer 29	25	35	27	28	35	150
Customer 30	28	35	28	28	32	151
Customer 31	28	31	26	26	30	141
Customer 32	23	27	23	24	30	127
Customer 33	20	35	27	27	34	143
Customer 34	27	26	23	23	31	130
Customer 35	28	35	28	28	34	153
Customer 36	24	29	24	24	33	134
Customer 37	27	34	28	28	33	150
Customer 38	27	35	27	27	32	148
Customer 39	24	34	26	26	33	143
Customer 40	28	35	28	28	35	154
Customer 41	25	35	28	28	35	151
Customer 42	28	35	28	28	35	154
Customer 43	25	35	26	27	29	142
Customer 44	24	30	24	24	30	132
Customer 45	14	28	23	24	29	118
Customer 46	22	35	28	28	35	148
Customer 47	20	35	25	28	30	138
Customer 48	22	35	28	27	32	144
Customer 49	24	28	23	25	31	131
Customer 50	19	32	25	26	34	136
Customer 51	23	31	25	24	31	134
Customer 52	27	35	27	27	31	147
Customer 53	25	35	28	28	35	151
Customer 54	22	31	27	27	35	142
Customer 55	24	35	28	28	35	150
Customer 56	17	34	28	28	32	139
Customer 57	26	32	22	24	34	138
Customer 58	24	30	25	24	34	137
Customer 59	26	35	28	28	35	152
Customer 60	26	34	27	27	34	148
Customer 61	28	34	28	28	31	149
Customer 62	23	30	18	18	22	111
Customer 63	28	35	28	28	35	154

Table I47: Perception Sub-Total Scores for Customers at Dealership K

DEALERSHIP K						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	28	35	28	27	35	153
Customer 2	28	35	28	28	35	154
Customer 3	28	31	23	22	26	130
Customer 4	28	32	28	28	35	151
Customer 5	23	27	20	22	28	120
Customer 6	27	32	25	25	32	141
Customer 7	23	27	20	21	23	114
Customer 8	27	30	23	23	33	136
Customer 9	26	35	28	25	33	147
Customer 10	23	23	24	25	27	122
Customer 11	21	25	20	19	25	110
Customer 12	24	30	22	21	27	124
Customer 13	28	35	28	28	29	148
Customer 14	28	35	18	28	30	139
Customer 15	22	15	19	21	26	103
Customer 16	22	32	25	27	30	136
Customer 17	28	11	16	16	11	82
Customer 18	19	24	21	22	24	110
Customer 19	21	25	20	20	25	111
Customer 20	26	35	28	27	34	150
Customer 21	25	32	27	26	35	145
Customer 22	23	30	24	24	30	131
Customer 23	19	31	27	24	30	131
Customer 24	21	28	26	25	32	132
Customer 25	28	35	28	28	35	154
Customer 26	25	32	28	28	34	147
Customer 27	25	33	25	25	30	138
Customer 28	25	32	26	26	34	143
Customer 29	23	23	22	22	29	119
Customer 30	24	26	28	28	35	141
Customer 31	24	21	19	20	23	107
Customer 32	19	25	20	20	25	109
Customer 33	23	30	26	25	26	130
Customer 34	24	31	23	23	27	128
Customer 35	23	26	20	20	25	114
Customer 36	28	35	28	28	35	154
Customer 37	24	28	23	26	29	130

Customer 38	24	19	24	22	29	118
Customer 39	28	34	27	28	34	151
Customer 40	28	34	28	28	32	150
Customer 41	27	35	28	28	35	153
Customer 42	26	23	18	16	21	104
Customer 43	23	30	27	27	32	139
Customer 44	24	26	21	22	26	119
Customer 45	22	29	23	24	29	127
Customer 46	20	28	23	25	29	125
Customer 47	22	29	27	28	30	136
Customer 48	23	33	24	24	32	136
Customer 49	26	29	26	26	33	140
Customer 50	25	26	23	24	30	128
Customer 51	25	32	23	24	27	131
Customer 52	24	35	28	28	35	150
Customer 53	27	35	28	28	35	153
Customer 54	25	31	25	27	32	140
Customer 55	24	34	26	27	32	143
Customer 56	19	32	28	28	34	141
Customer 57	25	34	22	25	32	138
Customer 58	24	33	28	28	33	146
Customer 59	24	33	26	26	31	140
Customer 60	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-

Table I48: SERVQUAL Calculated Scores for Customers at Dealership K

DEALERSHIP K							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.00	0.00	0.00	-0.25	0.00	-0.05	-0.08
Customer 2	0.00	0.00	0.25	0.00	0.00	0.05	0.08
Customer 3	0.25	-0.40	-1.25	-1.50	-1.80	-0.94	-0.61
Customer 4	0.00	-0.60	0.00	0.00	0.00	-0.12	-0.18
Customer 5	-0.25	-1.40	-1.00	-1.50	-1.00	-1.03	-1.08
Customer 6	2.50	2.60	1.25	1.75	0.60	1.74	2.16
Customer 7	-1.00	-1.60	-2.00	-1.75	-2.40	-1.75	-1.68
Customer 8	0.75	0.00	0.00	-0.50	0.80	0.21	0.06
Customer 9	0.50	1.00	0.75	-0.75	0.20	0.34	0.34
Customer 10	-0.50	-1.80	-0.75	0.75	0.40	-0.38	0.27
Customer 11	-1.25	-2.00	-2.00	-2.25	-1.80	-1.86	-1.86
Customer 12	0.25	-0.80	-0.75	-1.75	-0.40	-0.69	-0.80
Customer 13	0.75	0.60	0.25	1.00	-1.20	0.28	0.44
Customer 14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 15	-0.25	-4.00	-1.75	-1.75	-0.20	-1.59	-2.35
Customer 16	0.75	-0.40	-0.50	0.25	0.00	0.02	-0.14
Customer 17	0.00	-4.80	-3.00	-3.00	-4.80	-3.12	-3.60
Customer 18	-1.00	-1.40	-0.50	-0.50	-1.00	-0.88	-1.14
Customer 19	0.50	0.20	0.25	0.00	0.00	0.19	0.19
Customer 20	0.00	0.20	0.25	-0.25	0.00	0.04	0.17
Customer 21	1.50	-0.60	0.00	-0.50	0.40	0.16	-0.28
Customer 22	0.25	0.40	0.25	0.25	0.20	0.27	0.27
Customer 23	0.00	-0.40	0.00	0.00	-0.20	-0.12	-0.14
Customer 24	-1.25	-1.40	-0.50	-0.75	-0.60	-0.90	-0.92
Customer 25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 26	0.25	-0.60	0.00	0.00	-0.20	-0.11	-0.20
Customer 27	-0.75	-0.40	-0.75	-0.75	-0.60	-0.65	-0.53
Customer 28	0.75	0.40	-0.25	-0.50	0.00	0.08	0.16
Customer 29	-0.50	-2.40	-1.25	-1.50	-1.20	-1.37	-1.36
Customer 30	-1.00	-1.80	0.00	0.00	0.60	-0.44	-0.22
Customer 31	-1.00	-2.00	-1.75	-1.50	-1.40	-1.53	-1.59
Customer 32	-1.00	-0.40	-0.75	-1.00	-1.00	-0.83	-0.65
Customer 33	0.75	-1.00	-0.25	-0.50	-1.60	-0.52	-0.52
Customer 34	-0.75	1.00	0.00	0.00	-0.80	-0.11	0.17
Customer 35	-1.25	-1.80	-2.00	-2.00	-1.80	-1.77	-1.81
Customer 36	1.00	1.20	1.00	1.00	0.40	0.92	1.00

Customer 37	-0.75	-1.20	-1.25	-0.50	-0.80	-0.90	-0.92
Customer 38	-0.75	-3.20	-0.75	-1.25	-0.60	-1.31	-1.82
Customer 39	1.00	0.00	0.25	0.50	0.20	0.39	0.34
Customer 40	0.00	-0.20	0.00	0.00	-0.60	-0.16	-0.17
Customer 41	0.50	0.00	0.00	0.00	0.00	0.10	0.05
Customer 42	-0.50	-2.40	-2.50	-3.00	-2.80	-2.24	-2.13
Customer 43	-0.50	-1.00	0.25	0.00	0.60	-0.13	-0.45
Customer 44	0.00	-0.80	-0.75	-0.50	-0.80	-0.57	-0.65
Customer 45	2.00	0.20	0.00	0.00	0.00	0.44	0.22
Customer 46	-0.50	-1.40	-1.25	-0.75	-1.20	-1.02	-1.31
Customer 47	0.50	-1.20	0.50	0.00	0.00	-0.04	-1.05
Customer 48	0.25	-0.40	-1.00	-0.75	0.00	-0.38	-0.39
Customer 49	0.50	0.20	0.75	0.25	0.40	0.42	0.31
Customer 50	1.50	-1.20	-0.50	-0.50	-0.80	-0.30	-0.61
Customer 51	0.50	0.20	-0.50	0.00	-0.80	-0.12	-0.04
Customer 52	-0.75	0.00	0.25	0.25	0.80	0.11	0.19
Customer 53	0.50	0.00	0.00	0.00	0.00	0.10	0.03
Customer 54	0.75	0.00	-0.50	0.00	-0.60	-0.07	-0.09
Customer 55	0.00	-0.20	-0.50	-0.25	-0.60	-0.31	-0.30
Customer 56	0.50	-0.40	0.00	0.00	0.40	0.10	-0.40
Customer 57	-0.25	0.40	0.00	0.25	-0.40	0.00	0.00
Customer 58	0.00	0.60	0.75	1.00	-0.20	0.43	0.47
Customer 59	-0.50	-0.40	-0.50	-0.50	-0.80	-0.54	-0.43
Customer 60	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-
Average	0.05	-0.62	-0.41	-0.43	-0.49	-0.38	-0.43

Table I49: SERVPERF Calculated Scores for Customers at Dealership K

DEALERSHIP K							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	7.00	7.00	7.00	6.75	7.00	6.95	6.93
Customer 2	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 3	7.00	6.20	5.75	5.50	5.20	5.93	6.15
Customer 4	7.00	6.40	7.00	7.00	7.00	6.88	6.82
Customer 5	5.75	5.40	5.00	5.50	5.60	5.45	5.44
Customer 6	6.75	6.40	6.25	6.25	6.40	6.41	6.47
Customer 7	5.75	5.40	5.00	5.25	4.60	5.20	5.30
Customer 8	6.75	6.00	5.75	5.75	6.60	6.17	6.04
Customer 9	6.50	7.00	7.00	6.25	6.60	6.67	6.67
Customer 10	5.75	4.60	6.00	6.25	5.40	5.60	5.99
Customer 11	5.25	5.00	5.00	4.75	5.00	5.00	5.01
Customer 12	6.00	6.00	5.50	5.25	5.40	5.63	5.63
Customer 13	7.00	7.00	7.00	7.00	5.80	6.76	6.88
Customer 14	7.00	7.00	4.50	7.00	6.00	6.30	5.95
Customer 15	5.50	3.00	4.75	5.25	5.20	4.74	4.27
Customer 16	5.50	6.40	6.25	6.75	6.00	6.18	6.31
Customer 17	7.00	2.20	4.00	4.00	2.20	3.88	3.40
Customer 18	4.75	4.80	5.25	5.50	4.80	5.02	4.91
Customer 19	5.25	5.00	5.00	5.00	5.00	5.05	5.05
Customer 20	6.50	7.00	7.00	6.75	6.80	6.81	6.97
Customer 21	6.25	6.40	6.75	6.50	7.00	6.58	6.53
Customer 22	5.75	6.00	6.00	6.00	6.00	5.95	5.98
Customer 23	4.75	6.20	6.75	6.00	6.00	5.94	6.16
Customer 24	5.25	5.60	6.50	6.25	6.40	6.00	6.00
Customer 25	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 26	6.25	6.40	7.00	7.00	6.80	6.69	6.71
Customer 27	6.25	6.60	6.25	6.25	6.00	6.27	6.45
Customer 28	6.25	6.40	6.50	6.50	6.80	6.49	6.44
Customer 29	5.75	4.60	5.50	5.50	5.80	5.43	5.44
Customer 30	6.00	5.20	7.00	7.00	7.00	6.44	6.72
Customer 31	6.00	4.20	4.75	5.00	4.60	4.91	4.81
Customer 32	4.75	5.00	5.00	5.00	5.00	4.95	4.99
Customer 33	5.75	6.00	6.50	6.25	5.20	5.94	5.97
Customer 34	6.00	6.20	5.75	5.75	5.40	5.82	5.95
Customer 35	5.75	5.20	5.00	5.00	5.00	5.19	5.18
Customer 36	7.00	7.00	7.00	7.00	7.00	7.00	7.00

Customer 37	6.00	5.60	5.75	6.50	5.80	5.93	5.91
Customer 38	6.00	3.80	6.00	5.50	5.80	5.42	5.00
Customer 39	7.00	6.80	6.75	7.00	6.80	6.87	6.86
Customer 40	7.00	6.80	7.00	7.00	6.40	6.84	6.83
Customer 41	6.75	7.00	7.00	7.00	7.00	6.95	6.98
Customer 42	6.50	4.60	4.50	4.00	4.20	4.76	4.87
Customer 43	5.75	6.00	6.75	6.75	6.40	6.33	6.31
Customer 44	6.00	5.20	5.25	5.50	5.20	5.43	5.36
Customer 45	5.50	5.80	5.75	6.00	5.80	5.77	5.79
Customer 46	5.00	5.60	5.75	6.25	5.80	5.68	5.62
Customer 47	5.50	5.80	6.75	7.00	6.00	6.21	5.87
Customer 48	5.75	6.60	6.00	6.00	6.40	6.15	6.38
Customer 49	6.50	5.80	6.50	6.50	6.60	6.38	6.09
Customer 50	6.25	5.20	5.75	6.00	6.00	5.84	5.66
Customer 51	6.25	6.40	5.75	6.00	5.40	5.96	6.02
Customer 52	6.00	7.00	7.00	7.00	7.00	6.80	6.80
Customer 53	6.75	7.00	7.00	7.00	7.00	6.95	6.99
Customer 54	6.25	6.20	6.25	6.75	6.40	6.37	6.38
Customer 55	6.00	6.80	6.50	6.75	6.40	6.49	6.61
Customer 56	4.75	6.40	7.00	7.00	6.80	6.39	6.40
Customer 57	6.25	6.80	5.50	6.25	6.40	6.24	6.18
Customer 58	6.00	6.60	7.00	7.00	6.60	6.64	6.60
Customer 59	6.00	6.60	6.50	6.50	6.20	6.36	6.56
Customer 60	-	-	-	-	-	-	-
Customer 61	-	-	-	-	-	-	-
Customer 62	-	-	-	-	-	-	-
Customer 63	-	-	-	-	-	-	-
Average	6.09	5.92	6.09	6.17	5.98	6.05	6.04

Table I50: Cronbach Alpha Scores for Customers at Dealership K

DEALERSHIP K					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.81	0.89	0.76	0.88	0.80
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.76	0.92	0.81	0.89	0.88

Table I51: Expectation Sub-Total Scores for Customers at Dealership L

DEALERSHIP L						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	19	28	19	21	28	115
Customer 2	11	20	20	23	18	92
Customer 3	22	33	23	23	26	127
Customer 4	25	35	28	28	31	147
Customer 5	28	35	28	28	35	154
Customer 6	26	34	27	28	32	147
Customer 7	28	33	28	28	34	151
Customer 8	28	35	28	28	35	154
Customer 9	20	35	28	27	35	145
Customer 10	21	34	27	23	32	137
Customer 11	24	28	23	26	28	129
Customer 12	25	33	25	25	34	142
Customer 13	26	35	28	28	34	151
Customer 14	26	35	27	28	34	150
Customer 15	25	35	28	28	35	151
Customer 16	24	30	27	28	32	141
Customer 17	20	34	26	27	33	140
Customer 18	28	35	28	28	35	154
Customer 19	26	35	28	28	34	151
Customer 20	24	29	23	24	30	130
Customer 21	24	32	25	24	31	136
Customer 22	17	29	23	26	31	126

Table I52: Perception Sub-Total Scores for Customers at Dealership L

DEALERSHIP L						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	20	29	26	26	31	132
Customer 2	13	18	12	14	18	75
Customer 3	20	22	19	18	26	105
Customer 4	26	27	24	22	29	128
Customer 5	28	35	28	28	35	154
Customer 6	25	33	24	27	28	137
Customer 7	28	34	28	28	34	152
Customer 8	28	34	28	28	35	153
Customer 9	21	34	27	28	35	145
Customer 10	19	28	22	23	26	118
Customer 11	26	33	24	26	33	142
Customer 12	23	31	24	26	27	131
Customer 13	25	32	27	28	30	142
Customer 14	25	33	27	25	31	141
Customer 15	21	23	20	20	26	110
Customer 16	26	35	28	27	31	147
Customer 17	24	31	21	21	25	122
Customer 18	27	35	28	28	35	153
Customer 19	27	35	28	28	35	153
Customer 20	23	29	24	24	26	126
Customer 21	25	31	24	23	30	133
Customer 22	-	-	-	-	-	-

Table I53: SERVQUAL Calculated Scores for Customers at Dealership L

DEALERSHIP L							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	0.25	0.20	1.75	1.25	0.60	0.81	0.35
Customer 2	0.50	-0.40	-2.00	-2.25	0.00	-0.83	-0.75
Customer 3	-0.50	-2.20	-1.00	-1.25	0.00	-0.99	-1.49
Customer 4	0.25	-1.60	-1.00	-1.50	-0.40	-0.85	-1.16
Customer 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customer 6	-0.25	-0.20	-0.75	-0.25	-0.80	-0.45	-0.36
Customer 7	0.00	0.20	0.00	0.00	0.00	0.04	0.04
Customer 8	0.00	-0.20	0.00	0.00	0.00	-0.04	-0.05
Customer 9	0.25	-0.20	-0.25	0.25	0.00	0.01	-0.10
Customer 10	-0.50	-1.20	-1.25	0.00	-1.20	-0.83	-0.81
Customer 11	0.50	1.00	0.25	0.00	1.00	0.55	0.63
Customer 12	-0.50	-0.40	-0.25	0.25	-1.40	-0.46	-0.35
Customer 13	-0.25	-0.60	-0.25	0.00	-0.80	-0.38	-0.53
Customer 14	-0.25	-0.40	0.00	-0.75	-0.60	-0.40	-0.38
Customer 15	-1.00	-2.40	-2.00	-2.00	-1.80	-1.84	-2.13
Customer 16	0.50	1.00	0.25	-0.25	-0.20	0.26	0.20
Customer 17	1.00	-0.60	-1.25	-1.50	-1.60	-0.79	-0.70
Customer 18	-0.25	0.00	0.00	0.00	0.00	-0.05	-0.05
Customer 19	0.25	0.00	0.00	0.00	0.20	0.09	0.07
Customer 20	-0.25	0.00	0.25	0.00	-0.80	-0.16	-0.07
Customer 21	0.25	-0.20	-0.25	-0.25	-0.20	-0.13	-0.16
Customer 22	-	-	-	-	-	-	-
Average	0.00	-0.39	-0.37	-0.39	-0.38	-0.31	-0.37

Table I54: SERVPERF Calculated Scores for Customers at Dealership L

DEALERSHIP L							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	5.00	5.80	6.50	6.50	6.20	6.00	5.85
Customer 2	3.25	3.60	3.00	3.50	3.60	3.39	3.46
Customer 3	5.00	4.40	4.75	4.50	5.20	4.77	4.61
Customer 4	6.50	5.40	6.00	5.50	5.80	5.84	5.69
Customer 5	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Customer 6	6.25	6.60	6.00	6.75	5.60	6.24	6.33
Customer 7	7.00	6.80	7.00	7.00	6.80	6.92	6.92
Customer 8	7.00	6.80	7.00	7.00	7.00	6.96	6.95
Customer 9	5.25	6.80	6.75	7.00	7.00	6.56	6.68
Customer 10	4.75	5.60	5.50	5.75	5.20	5.36	5.45
Customer 11	6.50	6.60	6.00	6.50	6.60	6.44	6.45
Customer 12	5.75	6.20	6.00	6.50	5.40	5.97	6.13
Customer 13	6.25	6.40	6.75	7.00	6.00	6.48	6.43
Customer 14	6.25	6.60	6.75	6.25	6.20	6.41	6.48
Customer 15	5.25	4.60	5.00	5.00	5.20	5.01	4.83
Customer 16	6.50	7.00	7.00	6.75	6.20	6.69	6.71
Customer 17	6.00	6.20	5.25	5.25	5.00	5.54	5.87
Customer 18	6.75	7.00	7.00	7.00	7.00	6.95	6.95
Customer 19	6.75	7.00	7.00	7.00	7.00	6.95	6.99
Customer 20	5.75	5.80	6.00	6.00	5.20	5.75	5.77
Customer 21	6.25	6.20	6.00	5.75	6.00	6.04	5.99
Customer 22	-	-	-	-	-	-	-
Average	5.95	6.11	6.11	6.17	5.96	6.06	6.07

Table I55: Cronbach Alpha Scores for Customers at Dealership L

DEALERSHIP L					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.86	0.84	0.80	0.81	0.88
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.88	0.94	0.90	0.91	0.90

Table I56: Expectation Sub-Total Scores for Customers at Dealership M

DEALERSHIP M						
Expectations Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	23	35	27	28	33	146
Customer 2	20	21	15	17	25	98
Customer 3	27	34	27	27	35	150
Customer 4	28	35	28	28	34	153
Customer 5	25	34	25	26	31	141
Customer 6	28	35	28	28	35	154
Customer 7	25	32	28	26	30	141
Customer 8	23	35	28	28	34	148
Customer 9	21	22	22	22	28	115
Customer 10	27	35	28	25	33	148
Customer 11	20	32	23	26	31	132
Customer 12	28	35	27	28	34	152
Customer 13	24	32	25	27	33	141
Customer 14	24	35	28	28	35	150
Customer 15	23	32	26	25	28	134
Customer 16	28	35	28	28	35	154
Customer 17	26	34	27	27	34	148
Customer 18	22	30	24	24	26	126
Customer 19	28	35	28	28	35	154
Customer 20	28	35	23	28	35	149
Customer 21	25	31	25	24	34	139
Customer 22	20	35	28	28	35	146
Customer 23	26	35	28	26	32	147
Customer 24	24	34	26	26	30	140
Customer 25	28	35	28	28	35	154
Customer 26	28	32	27	26	29	142
Customer 27	23	34	26	28	35	146
Customer 28	24	35	28	27	33	147
Customer 29	26	19	19	19	17	100
Customer 30	24	30	24	24	30	132
Customer 31	23	30	24	24	29	130
Customer 32	22	31	26	26	33	138
Customer 33	28	33	27	26	32	146
Customer 34	26	35	28	26	32	147
Customer 35	20	31	21	27	26	125
Customer 36	28	33	26	25	29	141

Table I57: Perception Sub-Total Scores for Customers at Dealership M

DEALERSHIP M						
Perceptions Sub-Totals						
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Customer 1	27	33	25	26	32	143
Customer 2	18	12	11	15	21	77
Customer 3	22	24	20	21	29	116
Customer 4	24	35	25	28	34	146
Customer 5	22	30	24	25	30	131
Customer 6	28	33	28	28	35	152
Customer 7	27	33	26	28	35	149
Customer 8	23	28	21	24	30	126
Customer 9	22	27	22	21	27	119
Customer 10	19	32	21	23	30	125
Customer 11	25	26	27	25	30	133
Customer 12	24	29	25	23	30	131
Customer 13	21	28	18	20	29	116
Customer 14	25	26	24	24	30	129
Customer 15	25	32	27	27	32	143
Customer 16	24	32	21	21	30	128
Customer 17	22	30	26	22	30	130
Customer 18	21	29	22	22	26	120
Customer 19	26	29	27	28	33	143
Customer 20	25	34	21	26	32	138
Customer 21	23	27	21	20	26	117
Customer 22	23	25	16	18	27	109
Customer 23	23	30	22	24	29	128
Customer 24	26	34	26	25	33	144
Customer 25	27	35	27	28	35	152
Customer 26	28	33	28	27	28	144
Customer 27	23	31	28	25	31	138
Customer 28	28	31	26	26	32	143
Customer 29	21	20	16	14	18	89
Customer 30	21	24	20	20	25	110
Customer 31	22	26	20	20	25	113
Customer 32	21	30	25	25	31	132
Customer 33	20	27	26	25	34	132
Customer 34	-	-	-	-	-	-
Customer 35	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-

Table I58: SERVQUAL Calculated Scores for Customers at Dealership M

DEALERSHIP M							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Customer 1	1.00	-0.40	-0.50	-0.50	-0.20	-0.12	-0.10
Customer 2	-0.50	-1.80	-1.00	-0.50	-0.80	-0.92	-0.79
Customer 3	-1.25	-2.00	-1.75	-1.50	-1.20	-1.54	-1.62
Customer 4	-1.00	0.00	-0.75	0.00	0.00	-0.35	-0.32
Customer 5	-0.75	-0.80	-0.25	-0.25	-0.20	-0.45	-0.43
Customer 6	0.00	-0.40	0.00	0.00	0.00	-0.08	-0.08
Customer 7	0.50	0.20	-0.50	0.50	1.00	0.34	0.37
Customer 8	0.00	-1.40	-1.75	-1.00	-0.80	-0.99	-1.13
Customer 9	0.25	1.00	0.00	-0.25	-0.20	0.16	0.53
Customer 10	-2.00	-0.60	-1.75	-0.50	-0.60	-1.09	-0.89
Customer 11	1.25	-1.20	1.00	-0.25	-0.20	0.12	-0.16
Customer 12	-1.00	-1.20	-0.50	-1.25	-0.80	-0.95	-0.80
Customer 13	-0.75	-0.80	-1.75	-1.75	-0.80	-1.17	-1.46
Customer 14	0.25	-1.80	-1.00	-1.00	-1.00	-0.91	-1.09
Customer 15	0.50	0.00	0.25	0.50	0.80	0.41	0.36
Customer 16	-1.00	-0.60	-1.75	-1.75	-1.00	-1.22	-0.99
Customer 17	-1.00	-0.80	-0.25	-1.25	-0.80	-0.82	-0.77
Customer 18	-0.25	-0.20	-0.50	-0.50	0.00	-0.29	-0.30
Customer 19	-0.50	-1.20	-0.25	0.00	-0.40	-0.47	-0.34
Customer 20	-0.75	-0.20	-0.50	-0.50	-0.60	-0.51	-0.48
Customer 21	-0.50	-0.80	-1.00	-1.00	-1.60	-0.98	-0.89
Customer 22	0.75	-2.00	-3.00	-2.50	-1.60	-1.67	-1.74
Customer 23	-0.75	-1.00	-1.50	-0.50	-0.60	-0.87	-0.94
Customer 24	0.50	0.00	0.00	-0.25	0.60	0.17	0.17
Customer 25	-0.25	0.00	-0.25	0.00	0.00	-0.10	-0.06
Customer 26	0.00	0.20	0.25	0.25	-0.20	0.10	0.08
Customer 27	0.00	-0.60	0.50	-0.75	-0.80	-0.33	-0.50
Customer 28	1.00	-0.80	-0.50	-0.25	-0.20	-0.15	-0.39
Customer 29	-1.25	0.20	-0.75	-1.25	0.20	-0.57	-0.57
Customer 30	-0.75	-1.20	-1.00	-1.00	-1.00	-0.99	-1.12
Customer 31	-0.25	-0.80	-1.00	-1.00	-0.80	-0.77	-0.84
Customer 32	-0.25	-0.20	-0.25	-0.25	-0.40	-0.27	-0.27
Customer 33	-2.00	-1.20	-0.25	-0.25	0.40	-0.66	-0.57
Customer 34	-	-	-	-	-	-	-
Customer 35	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-
Average	-0.33	-0.68	-0.67	-0.62	-0.42	-0.54	-0.55

Table I59: SERVPERF Calculated Scores for Customers at Dealership M

DEALERSHIP M							
Calculated Scores							
Customer	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Customer 1	6.75	6.60	6.25	6.50	6.40	6.50	6.45
Customer 2	4.50	2.40	2.75	3.75	4.20	3.52	3.66
Customer 3	5.50	4.80	5.00	5.25	5.80	5.27	5.20
Customer 4	6.00	7.00	6.25	7.00	6.80	6.61	6.64
Customer 5	5.50	6.00	6.00	6.25	6.00	5.95	6.00
Customer 6	7.00	6.60	7.00	7.00	7.00	6.92	6.92
Customer 7	6.75	6.60	6.50	7.00	7.00	6.77	6.78
Customer 8	5.75	5.60	5.25	6.00	6.00	5.72	5.70
Customer 9	5.50	5.40	5.50	5.25	5.40	5.41	5.43
Customer 10	4.75	6.40	5.25	5.75	6.00	5.63	6.00
Customer 11	6.25	5.20	6.75	6.25	6.00	6.09	5.93
Customer 12	6.00	5.80	6.25	5.75	6.00	5.96	6.06
Customer 13	5.25	5.60	4.50	5.00	5.80	5.23	5.07
Customer 14	6.25	5.20	6.00	6.00	6.00	5.89	5.76
Customer 15	6.25	6.40	6.75	6.75	6.40	6.51	6.53
Customer 16	6.00	6.40	5.25	5.25	6.00	5.78	6.01
Customer 17	5.50	6.00	6.50	5.50	6.00	5.90	5.98
Customer 18	5.25	5.80	5.50	5.50	5.20	5.45	5.46
Customer 19	6.50	5.80	6.75	7.00	6.60	6.53	6.67
Customer 20	6.25	6.80	5.25	6.50	6.40	6.24	6.34
Customer 21	5.75	5.40	5.25	5.00	5.20	5.32	5.36
Customer 22	5.75	5.00	4.00	4.50	5.40	4.93	4.86
Customer 23	5.75	6.00	5.50	6.00	5.80	5.81	5.91
Customer 24	6.50	6.80	6.50	6.25	6.60	6.53	6.53
Customer 25	6.75	7.00	6.75	7.00	7.00	6.90	6.94
Customer 26	7.00	6.60	7.00	6.75	5.60	6.59	6.61
Customer 27	5.75	6.20	7.00	6.25	6.20	6.28	6.25
Customer 28	7.00	6.20	6.50	6.50	6.40	6.52	6.42
Customer 29	5.25	4.00	4.00	3.50	3.60	4.07	4.14
Customer 30	5.25	4.80	5.00	5.00	5.00	5.01	4.89
Customer 31	5.50	5.20	5.00	5.00	5.00	5.14	5.13
Customer 32	5.25	6.00	6.25	6.25	6.20	5.99	6.09
Customer 33	5.00	5.40	6.50	6.25	6.80	5.99	6.06
Customer 34	-	-	-	-	-	-	-
Customer 35	-	-	-	-	-	-	-
Customer 36	-	-	-	-	-	-	-
Average	5.88	5.79	5.77	5.86	5.93	5.85	5.87

Table I60: Cronbach Alpha Scores for Customers at Dealership M

DEALERSHIP M					
Expectations					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.71	0.87	0.77	0.81	0.88
Perceptions					
	Tangibles	Reliability	Responsiveness	Assurance	Empathy
Cronbach's Alpha	0.75	0.88	0.86	0.93	0.90

9.10 Appendix J – Dealership Employee Results

In the following Appendix all the calculated results from the Employees' data from Appendix H are included. These results contain the Employees' Expectation Sub-Total Scores; Employees' Perception Sub-Total Scores; Employees' SERVQUAL Calculated Scores; Employees' SERVPERF Calculated Scores and the Employees' Cronbach Alpha Scores. Each Table indicates the Dealership whose data is being displayed. Tables for Dealership A also contain the column numbering assigned to each of the four types of results tables for each Dealership. This numbering is used when referring to a data set in Chapter 5.

Table J1: Expectation Sub-Total Scores for Employees at Dealership A

DEALERSHIP A						
Expectations Sub-Totals						
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	25	30	24	24	26	129
Employee 2	18	30	24	28	31	131
Employee 3	26	34	27	27	34	148
Employee 4	20	35	25	28	34	142
Employee 5	28	35	28	28	35	154
Employee 6	26	33	28	28	35	150
Employee 7	28	35	28	28	35	154
Employee 8	25	33	21	24	32	135

Table J2: Perception Sub-Total Scores for Employees at Dealership A

DEALERSHIP A						
Perceptions Sub-Totals						
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	18	31	24	25	32	130
Employee 2	16	26	20	20	31	113
Employee 3	25	33	27	26	34	145
Employee 4	13	26	25	26	30	120
Employee 5	27	33	25	24	31	140
Employee 6	26	35	28	28	35	152
Employee 7	26	35	28	28	35	152
Employee 8	21	32	22	27	31	133

Table J3: SERVQUAL Calculated Scores for Employees at Dealership A

DEALERSHIP A							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Employee 1	-1.75	0.20	0.00	0.25	1.20	-0.02	-0.02
Employee 2	-0.50	-0.80	-1.00	-2.00	0.00	-0.86	-0.72
Employee 3	-0.25	-0.20	0.00	-0.25	0.00	-0.14	-0.19
Employee 4	-1.75	-1.80	0.00	-0.50	-0.80	-0.97	-0.86
Employee 5	-0.25	-0.40	-0.75	-1.00	-0.80	-0.64	-0.61
Employee 6	0.00	0.40	0.00	0.00	0.00	0.08	0.08
Employee 7	-0.50	0.00	0.00	0.00	0.00	-0.10	-0.05
Employee 8	-1.00	-0.20	0.25	0.75	-0.20	-0.08	-0.07
Average	-0.75	-0.35	-0.19	-0.34	-0.08	-0.34	-0.30

Table J4: SERVPERF Calculated Scores for Employees at Dealership A

DEALERSHIP A							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Employee 1	4.50	6.20	6.00	6.25	6.40	5.87	5.87
Employee 2	4.00	5.20	5.00	5.00	6.20	5.08	5.12
Employee 3	6.25	6.60	6.75	6.50	6.80	6.58	6.49
Employee 4	3.25	5.20	6.25	6.50	6.00	5.44	5.58
Employee 5	6.75	6.60	6.25	6.00	6.20	6.36	6.40
Employee 6	6.50	7.00	7.00	7.00	7.00	6.90	6.90
Employee 7	6.50	7.00	7.00	7.00	7.00	6.90	6.95
Employee 8	5.25	6.40	5.50	6.75	6.20	6.02	6.28
Average	5.38	6.28	6.22	6.38	6.48	6.14	6.20

Table J5: Expectation Sub-Total Scores for Employees at Dealership B

DEALERSHIP B						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	28	33	26	28	35	150
Employee 2	19	25	16	25	20	105
Employee 3	28	35	28	28	32	151
Employee 4	24	20	22	22	28	116
Employee 5	28	35	28	28	35	154
Employee 6	28	35	24	25	35	147
Employee 7	28	35	28	28	35	154
Employee 8	28	34	28	28	32	150
Employee 9	23	31	24	28	34	140
Employee 10	26	33	28	26	34	147
Employee 11	28	35	28	28	34	153
Employee 12	28	29	22	25	30	134
Employee 13	28	35	27	28	35	153

Table J6: Perception Sub-Total Scores for Employees at Dealership B

DEALERSHIP B						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	28	32	25	25	35	145
Employee 2	22	20	17	16	24	99
Employee 3	28	35	28	28	35	154
Employee 4	23	22	21	19	25	110
Employee 5	22	20	22	22	30	116
Employee 6	28	26	25	25	35	139
Employee 7	20	24	22	23	27	116
Employee 8	22	30	23	24	34	133
Employee 9	27	30	23	26	32	138
Employee 10	26	30	26	27	34	143
Employee 11	21	19	17	16	23	96
Employee 12	28	24	25	24	32	133
Employee 13	22	23	17	21	26	109

Table J7: SERVQUAL Calculated Scores for Employees at Dealership B

DEALERSHIP B							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	0.00	-0.20	-0.25	-0.75	0.00	-0.24	-0.24
Employee 2	0.75	-1.00	0.25	-2.25	0.80	-0.29	0.24
Employee 3	0.00	0.00	0.00	0.00	0.60	0.12	0.06
Employee 4	-0.25	0.40	-0.25	-0.75	-0.60	-0.29	-0.28
Employee 5	-1.50	-3.00	-1.50	-1.50	-1.00	-1.70	-1.70
Employee 6	0.00	-1.80	0.25	0.00	0.00	-0.31	-0.31
Employee 7	-2.00	-2.20	-1.50	-1.25	-1.60	-1.71	-1.62
Employee 8	-1.50	-0.80	-1.25	-1.00	0.40	-0.83	-0.81
Employee 9	1.00	-0.20	-0.25	-0.50	-0.40	-0.07	-0.19
Employee 10	0.00	-0.60	-0.50	0.25	0.00	-0.17	-0.17
Employee 11	-1.75	-3.20	-2.75	-3.00	-2.20	-2.58	-2.58
Employee 12	0.00	-1.00	0.75	-0.25	0.40	-0.02	-0.41
Employee 13	-1.50	-2.40	-2.50	-1.75	-1.80	-1.99	-2.03
Average	-0.52	-1.23	-0.73	-0.98	-0.42	-0.78	-0.77

Table J8: SERVPERF Calculated Scores for Employees at Dealership B

DEALERSHIP B							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	7.00	6.40	6.25	6.25	7.00	6.58	6.58
Employee 2	5.50	4.00	4.25	4.00	4.80	4.51	4.85
Employee 3	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 4	5.75	4.40	5.25	4.75	5.00	5.03	5.19
Employee 5	5.50	4.00	5.50	5.50	6.00	5.30	5.30
Employee 6	7.00	5.20	6.25	6.25	7.00	6.34	6.34
Employee 7	5.00	4.80	5.50	5.75	5.40	5.29	5.39
Employee 8	5.50	6.00	5.75	6.00	6.80	6.01	6.04
Employee 9	6.75	6.00	5.75	6.50	6.40	6.28	6.19
Employee 10	6.50	6.00	6.50	6.75	6.80	6.51	6.51
Employee 11	5.25	3.80	4.25	4.00	4.60	4.38	4.38
Employee 12	7.00	4.80	6.25	6.00	6.40	6.09	5.67
Employee 13	5.50	4.60	4.25	5.25	5.20	4.96	4.93
Average	6.10	5.15	5.60	5.69	6.03	5.71	5.72

Table J9: Expectation Sub-Total Scores for Employees at Dealership D

DEALERSHIP D						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	25	35	28	28	35	151
Employee 2	24	21	20	23	25	113
Employee 3	28	35	28	28	35	154
Employee 4	26	35	28	28	35	152
Employee 5	26	35	28	28	35	152
Employee 6	28	35	28	28	35	154
Employee 7	28	35	28	28	35	154
Employee 8	28	35	28	28	34	153

Table J10: Perception Sub-Total Scores for Employees at Dealership D

DEALERSHIP D						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	28	31	18	20	24	121
Employee 2	21	21	21	19	25	107
Employee 3	28	35	28	28	35	154
Employee 4	21	23	23	19	30	116
Employee 5	23	29	24	23	30	129
Employee 6	28	35	28	28	35	154
Employee 7	28	35	28	28	35	154
Employee 8	21	31	27	28	34	141

Table J11: SERVQUAL Calculated Scores for Employees at Dealership D

DEALERSHIP D							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	0.75	-0.80	-2.50	-2.00	-2.20	-1.35	-1.35
Employee 2	-0.75	0.00	0.25	-1.00	0.00	-0.30	-0.19
Employee 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 4	-1.25	-2.40	-1.25	-2.25	-1.00	-1.63	-1.63
Employee 5	-0.75	-1.20	-1.00	-1.25	-1.00	-1.04	-1.04
Employee 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 8	-1.75	-0.80	-0.25	0.00	0.00	-0.56	-0.56
Average	-0.47	-0.65	-0.59	-0.81	-0.53	-0.61	-0.60

Table J12: SERVPERF Calculated Scores for Employees at Dealership D

DEALERSHIP D							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	7.00	6.20	4.50	5.00	4.80	5.50	5.50
Employee 2	5.25	4.20	5.25	4.75	5.00	4.89	4.89
Employee 3	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 4	5.25	4.60	5.75	4.75	6.00	5.27	5.27
Employee 5	5.75	5.80	6.00	5.75	6.00	5.86	5.86
Employee 6	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 7	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 8	5.25	6.20	6.75	7.00	6.80	6.40	6.40
Average	6.19	6.00	6.16	6.03	6.20	6.12	6.11

Table J13: Expectation Sub-Total Scores for Employees at Dealership E

DEALERSHIP E						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	25	33	27	28	33	146
Employee 2	26	34	27	26	32	145
Employee 3	28	33	28	28	34	151

Table J14: Perception Sub-Total Scores for Employees at Dealership E

DEALERSHIP E						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	25	31	27	28	34	145
Employee 2	23	34	26	27	30	140
Employee 3	27	34	28	28	35	152

Table J15: SERVQUAL Calculated Scores for Employees at Dealership E

DEALERSHIP E							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	0.00	-0.40	0.00	0.00	0.20	-0.04	-0.06
Employee 2	-0.75	0.00	-0.25	0.25	-0.40	-0.23	-0.32
Employee 3	-0.25	0.20	0.00	0.00	0.20	0.03	0.05
Average	-0.33	-0.07	-0.08	0.08	0.00	-0.08	-0.11

Table J16: SERVPERF Calculated Scores for Employees at Dealership E

DEALERSHIP E							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	6.25	6.20	6.75	7.00	6.80	6.60	6.42
Employee 2	5.75	6.80	6.50	6.75	6.00	6.36	6.35
Employee 3	6.75	6.80	7.00	7.00	7.00	6.91	6.87
Average	6.25	6.60	6.75	6.92	6.60	6.62	6.55

Table J17: Expectation Sub-Total Scores for Employees at Dealership F

DEALERSHIP F							
Expectations Sub-Totals							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL	
Employee 1	24	33	25	27	32	141	
Employee 2	23	28	27	26	32	136	
Employee 3	28	35	28	28	35	154	
Employee 4	27	30	27	28	29	141	
Employee 5	28	35	28	28	35	154	
Employee 6	27	35	28	28	35	153	
Employee 7	28	30	27	26	34	145	

Table J18: Perception Sub-Total Scores for Employees at Dealership F

DEALERSHIP F						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	21	18	12	17	24	92
Employee 2	25	31	26	24	32	138
Employee 3	28	32	27	27	35	149
Employee 4	24	24	25	23	33	129
Employee 5	28	35	28	28	35	154
Employee 6	25	33	27	25	35	145
Employee 7	24	30	24	24	30	132

Table J19: SERVQUAL Calculated Scores for Employees at Dealership F

DEALERSHIP F							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-0.75	-3.00	-3.25	-2.50	-1.60	-2.22	-2.59
Employee 2	0.50	0.60	-0.25	-0.50	0.00	0.07	0.05
Employee 3	0.00	-0.60	-0.25	-0.25	0.00	-0.22	-0.22
Employee 4	-0.75	-1.20	-0.50	-1.25	0.80	-0.58	-0.63
Employee 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 6	-0.50	-0.40	-0.25	-0.75	0.00	-0.38	-0.31
Employee 7	-1.00	0.00	-0.75	-0.50	-0.80	-0.61	-0.66
Average	-0.36	-0.66	-0.75	-0.82	-0.23	-0.56	-0.62

Table J20: SERVPERF Calculated Scores for Employees at Dealership F

DEALERSHIP F							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	5.25	3.60	3.00	4.25	4.80	4.18	3.80
Employee 2	6.25	6.20	6.50	6.00	6.40	6.27	6.28
Employee 3	7.00	6.40	6.75	6.75	7.00	6.78	6.78
Employee 4	6.00	4.80	6.25	5.75	6.60	5.88	5.76
Employee 5	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 6	6.25	6.60	6.75	6.25	7.00	6.57	6.65
Employee 7	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Average	6.25	5.80	6.04	6.00	6.40	6.10	6.04

Table J21: Expectation Sub-Total Scores for Employees at Dealership G

DEALERSHIP G						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	27	35	28	28	35	153
Employee 2	28	35	28	28	35	154
Employee 3	27	30	25	27	29	138
Employee 4	28	33	28	28	35	152
Employee 5	27	35	27	24	35	148

Table J22: Perception Sub-Total Scores for Employees at Dealership G

DEALERSHIP G						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	24	30	24	24	30	132
Employee 2	27	34	28	27	35	151
Employee 3	28	32	28	28	35	151
Employee 4	28	35	28	28	35	154
Employee 5	28	35	26	26	34	149

Table J23: SERVQUAL Calculated Scores for Employees at Dealership G

DEALERSHIP G							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-0.75	-1.00	-1.00	-1.00	-1.00	-0.95	-0.95
Employee 2	-0.25	-0.20	0.00	-0.25	0.00	-0.14	-0.14
Employee 3	0.25	0.40	0.75	0.25	1.20	0.57	0.57
Employee 4	0.00	0.40	0.00	0.00	0.00	0.08	0.08
Employee 5	0.25	0.00	-0.25	0.50	-0.20	0.06	0.04
Average	-0.10	-0.08	-0.10	-0.10	0.00	-0.08	-0.08

Table J24: SERVPERF Calculated Scores for Employees at Dealership G

DEALERSHIP G							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Employee 2	6.75	6.80	7.00	6.75	7.00	6.86	6.86
Employee 3	7.00	6.40	7.00	7.00	7.00	6.88	6.88
Employee 4	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 5	7.00	7.00	6.50	6.50	6.80	6.76	6.77
Average	6.75	6.64	6.70	6.65	6.76	6.70	6.70

Table J25: Expectation Sub-Total Scores for Employees at Dealership H

DEALERSHIP H						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	24	32	26	27	35	144
Employee 2	28	32	28	28	35	151
Employee 3	26	35	27	27	35	150

Table J26: Perception Sub-Total Scores for Employees at Dealership H

DEALERSHIP H						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	18	33	20	20	34	125
Employee 2	19	30	25	24	32	130
Employee 3	22	35	26	24	33	140

Table J27: SERVQUAL Calculated Scores for Employees at Dealership H

DEALERSHIP H							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-1.50	0.20	-1.50	-1.75	-0.20	-0.95	-0.80
Employee 2	-2.25	-0.40	-0.75	-1.00	-0.60	-1.00	-1.22
Employee 3	-1.00	0.00	-0.25	-0.75	-0.40	-0.48	-0.48
Average	-1.58	-0.07	-0.83	-1.17	-0.40	-0.81	-0.83

Table J28: SERVPERF Calculated Scores for Employees at Dealership H

DEALERSHIP H							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	4.50	6.60	5.00	5.00	6.80	5.58	5.76
Employee 2	4.75	6.00	6.25	6.00	6.40	5.88	5.70
Employee 3	5.50	7.00	6.50	6.00	6.60	6.32	6.32
Average	4.92	6.53	5.92	5.67	6.60	5.93	5.93

Table J29: Expectation Sub-Total Scores for Employees at Dealership I

DEALERSHIP I							
Expectations Sub-Totals							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL	
Employee 1	24	35	28	28	35	150	
Employee 2	24	35	28	28	34	149	
Employee 3	28	35	28	28	34	153	
Employee 4	25	35	25	28	35	148	
Employee 5	28	34	26	28	34	150	

Table J30: Perception Sub-Total Scores for Employees at Dealership I

DEALERSHIP I							
Perceptions Sub-Totals							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL	
Employee 1	25	29	23	26	32	135	
Employee 2	24	32	26	28	34	144	
Employee 3	28	35	28	28	34	153	
Employee 4	22	31	25	28	35	141	
Employee 5	24	29	25	20	31	129	

Table J31: SERVQUAL Calculated Scores for Employees at Dealership I

DEALERSHIP I							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	0.25	-1.20	-1.25	-0.50	-0.60	-0.66	-0.88
Employee 2	0.00	-0.60	-0.50	0.00	0.00	-0.22	-0.22
Employee 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 4	-0.75	-0.80	0.00	0.00	0.00	-0.31	-0.31
Employee 5	-1.00	-1.00	-0.25	-2.00	-0.60	-0.97	-0.97
Average	-0.30	-0.72	-0.40	-0.50	-0.24	-0.43	-0.48

Table J32: SERVPERF Calculated Scores for Employees at Dealership I

DEALERSHIP I							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	6.25	5.80	5.75	6.50	6.40	6.14	6.03
Employee 2	6.00	6.40	6.50	7.00	6.80	6.54	6.54
Employee 3	7.00	7.00	7.00	7.00	6.80	6.96	6.96
Employee 4	5.50	6.20	6.25	7.00	7.00	6.39	6.39
Employee 5	6.00	5.80	6.25	5.00	6.20	5.85	5.85
Average	6.15	6.24	6.35	6.50	6.64	6.38	6.35

Table J33: Expectation Sub-Total Scores for Employees at Dealership J

DEALERSHIP J							
Expectations Sub-Totals							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL	
Employee 1	24	28	24	24	30	130	
Employee 2	26	35	26	28	33	148	
Employee 3	15	31	26	26	32	130	
Employee 4	28	35	28	28	35	154	
Employee 5	25	30	24	24	30	133	
Employee 6	16	19	16	16	19	86	
Employee 7	23	31	27	26	33	140	

Table J34: Perception Sub-Total Scores for Employees at Dealership J

DEALERSHIP J						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	23	30	24	24	30	131
Employee 2	26	32	27	28	33	146
Employee 3	26	32	21	27	35	141
Employee 4	26	30	24	25	34	139
Employee 5	22	27	24	24	30	127
Employee 6	18	25	20	21	27	111
Employee 7	24	33	28	27	34	146

Table J35: SERVQUAL Calculated Scores for Employees at Dealership J

DEALERSHIP J							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-0.25	0.40	0.00	0.00	0.00	0.03	0.03
Employee 2	0.00	-0.60	0.25	0.00	0.00	-0.07	-0.03
Employee 3	2.75	0.20	-1.25	0.25	0.60	0.51	0.41
Employee 4	-0.50	-1.00	-1.00	-0.75	-0.20	-0.69	-0.85
Employee 5	-0.75	-0.60	0.00	0.00	0.00	-0.27	-0.27
Employee 6	0.50	1.20	1.00	1.25	1.60	1.11	1.16
Employee 7	0.25	0.40	0.25	0.25	0.20	0.27	0.27
Average	0.29	0.00	-0.11	0.14	0.31	0.13	0.10

Table J36: SERVPERF Calculated Scores for Employees at Dealership J

DEALERSHIP J							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	5.75	6.00	6.00	6.00	6.00	5.95	5.95
Employee 2	6.50	6.40	6.75	7.00	6.60	6.65	9.88
Employee 3	6.50	6.40	5.25	6.75	7.00	6.38	6.26
Employee 4	6.50	6.00	6.00	6.25	6.80	6.31	6.16
Employee 5	5.50	5.40	6.00	6.00	6.00	5.78	5.78
Employee 6	4.50	5.00	5.00	5.25	5.40	5.03	5.04
Employee 7	6.00	6.60	7.00	6.75	6.80	6.63	6.63
Average	5.89	5.97	6.00	6.29	6.37	6.10	6.53

Table J37: Expectation Sub-Total Scores for Employees at Dealership K

DEALERSHIP K						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	20	30	27	28	32	137
Employee 2	27	35	26	28	32	148
Employee 3	19	32	27	26	28	132
Employee 4	25	27	23	26	29	130
Employee 5	22	27	23	23	33	128
Employee 6	26	34	26	22	30	138
Employee 7	28	35	28	28	35	154
Employee 8	28	32	28	26	35	149
Employee 9	22	35	28	27	32	144

Table J38: Perception Sub-Total Scores for Employees at Dealership K

DEALERSHIP K						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	15	25	25	24	27	116
Employee 2	27	28	22	25	35	137
Employee 3	21	33	26	28	33	141
Employee 4	19	26	20	23	30	118
Employee 5	20	29	22	22	31	124
Employee 6	25	32	28	25	30	140
Employee 7	28	35	28	28	35	154
Employee 8	28	35	28	28	33	152
Employee 9	23	29	21	23	30	126

Table J39: SERVQUAL Calculated Scores for Employees at Dealership K

DEALERSHIP K							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-1.25	-1.00	-0.50	-1.00	-1.00	-0.95	-0.83
Employee 2	0.00	-1.40	-1.00	-0.75	0.60	-0.51	-0.60
Employee 3	0.50	0.20	-0.25	0.50	1.00	0.39	0.39
Employee 4	-1.50	-0.20	-0.75	-0.75	0.20	-0.60	-0.58
Employee 5	-0.50	0.40	-0.25	-0.25	-0.40	-0.20	-0.20
Employee 6	-0.25	-0.40	0.50	0.75	0.00	0.12	0.23
Employee 7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 8	0.00	0.60	0.00	0.50	-0.40	0.14	0.14
Employee 9	0.25	-1.20	-1.75	-1.00	-0.40	-0.82	-1.12
Average	-0.31	-0.33	-0.44	-0.22	-0.04	-0.27	-0.28

Table J40: SERVPERF Calculated Scores for Employees at Dealership K

DEALERSHIP K							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	3.75	5.00	6.25	6.00	5.40	5.28	5.59
Employee 2	6.75	5.60	5.50	6.25	7.00	6.22	6.12
Employee 3	5.25	6.60	6.50	7.00	6.60	6.39	6.39
Employee 4	4.75	5.20	5.00	5.75	6.00	5.34	5.35
Employee 5	5.00	5.80	5.50	5.50	6.20	5.60	5.60
Employee 6	6.25	6.40	7.00	6.25	6.00	6.38	6.62
Employee 7	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 8	7.00	7.00	7.00	7.00	6.60	6.92	6.92
Employee 9	5.75	5.80	5.25	5.75	6.00	5.71	5.75
Average	5.72	6.04	6.11	6.28	6.31	6.09	6.15

Table J41: Expectation Sub-Total Scores for Employees at Dealership L

DEALERSHIP L						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	23	30	24	28	32	137
Employee 2	28	33	28	28	35	152
Employee 3	28	34	24	24	30	140
Employee 4	28	34	28	28	34	152
Employee 5	27	34	27	28	29	145

Table J42: Perception Sub-Total Scores for Employees at Dealership L

DEALERSHIP L						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	12	29	21	23	31	116
Employee 2	13	23	22	20	29	107
Employee 3	22	30	28	28	35	143
Employee 4	28	35	27	27	35	152
Employee 5	25	29	26	22	32	134

Table J43: SERVQUAL Calculated Scores for Employees at Dealership L

DEALERSHIP L							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-2.75	-0.20	-0.75	-1.25	-0.20	-1.03	-0.88
Employee 2	-3.75	-2.00	-1.50	-2.00	-1.20	-2.09	-2.09
Employee 3	-1.50	-0.80	1.00	1.00	1.00	0.14	0.14
Employee 4	0.00	0.20	-0.25	-0.25	0.20	-0.02	-0.02
Employee 5	-0.50	-1.00	-0.25	-1.50	0.60	-0.53	-0.51
Average	-1.70	-0.76	-0.35	-0.80	0.08	-0.71	-0.67

Table J44: SERVPERF Calculated Scores for Employees at Dealership L

DEALERSHIP L							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	3.00	5.80	5.25	5.75	6.20	5.20	5.48
Employee 2	3.25	4.60	5.50	5.00	5.80	4.83	4.83
Employee 3	5.50	6.00	7.00	7.00	7.00	6.50	6.50
Employee 4	7.00	7.00	6.75	6.75	7.00	6.90	6.90
Employee 5	6.25	5.80	6.50	5.50	6.40	6.09	6.10
Average	5.00	5.84	6.20	6.00	6.48	5.90	5.96

Table J45: Expectation Sub-Total Scores for Employees at Dealership M

DEALERSHIP M						
Expectations Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	28	35	28	28	35	154
Employee 2	28	35	28	28	35	154
Employee 3	27	35	28	28	35	153
Employee 4	25	27	24	23	33	132
Employee 5	25	22	22	21	35	125

Table J46: Perception Sub-Total Scores for Employees at Dealership M

DEALERSHIP M						
Perceptions Sub-Totals						
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	TOTAL
Employee 1	24	31	25	22	30	132
Employee 2	28	35	28	28	35	154
Employee 3	28	31	28	28	35	150
Employee 4	24	31	24	22	32	133
Employee 5	26	27	25	25	33	136

Table J47: SERVQUAL Calculated Scores for Employees at Dealership M

DEALERSHIP M							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVQUAL SCORE	
						Un-weighted	Weighted
Employee 1	-1.00	-0.80	-0.75	-1.50	-1.00	-1.01	-0.95
Employee 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Employee 3	0.25	-0.80	0.00	0.00	0.00	-0.11	-0.17
Employee 4	-0.25	0.80	0.00	-0.25	-0.20	0.02	0.11
Employee 5	0.25	1.00	0.75	1.00	-0.40	0.52	0.61
Average	-0.15	0.04	0.00	-0.15	-0.32	-0.12	-0.08

Table J48: SERVPERF Calculated Scores for Employees at Dealership M

DEALERSHIP M							
Calculated Scores							
Employee	Tangibles	Reliability	Responsiveness	Assurance	Empathy	SERVPERF SCORE	
						Un-weighted	Weighted
Employee 1	6.00	6.20	6.25	5.50	6.00	5.99	6.05
Employee 2	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Employee 3	7.00	6.20	7.00	7.00	7.00	6.84	6.76
Employee 4	6.00	6.20	6.00	5.50	6.40	6.02	6.03
Employee 5	6.50	5.40	6.25	6.25	6.60	6.20	6.28
Average	6.50	6.20	6.50	6.25	6.60	6.41	6.42

9.11 Appendix K – Data Distribution Results

In the following appendix the results obtained from the tests carried out on the type of data distribution for the customers and employees for SERVQUAL weighted and SERVPERF un-weighted and weighted data sets, can be found. Each table and graph represents the complete data set of all 13 dealerships.

Table K1: Data Classes for SERVQUAL Weighted scores across all 13 dealerships

Classes	Customer	Employee
Less than -4.00	6	0
Between -3.99 and -3.00	10	0
Between -2.99 and -2.00	24	5
Between -1.99 and -1.00	80	7
Between -0.99 and 0.00	225	50
Between 0.01 and 1.00	107	19
Larger than 1.01	4	1
TOTAL	456	82

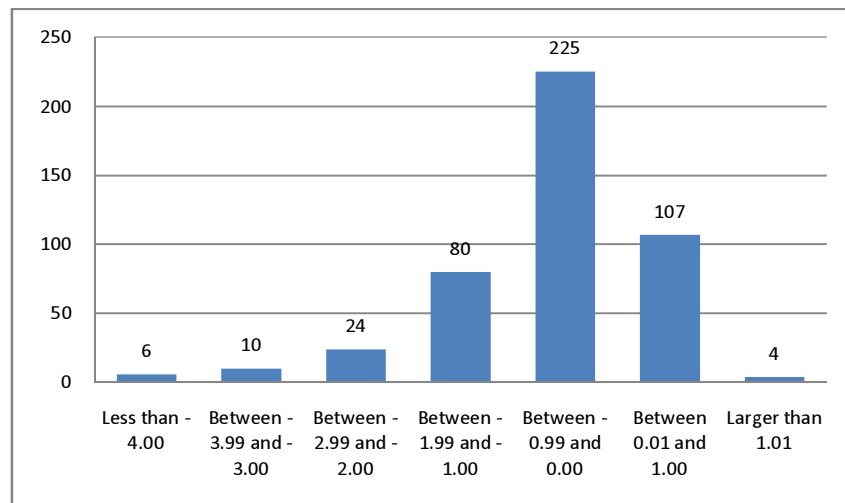


Figure K1: Customer Classes for SERVQUAL Weighted scores across all 13 dealerships

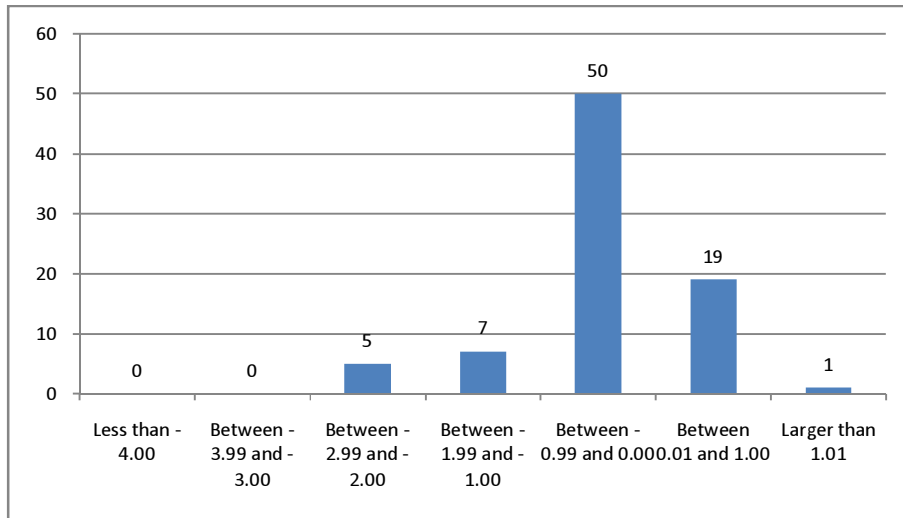


Figure K2: Employee Classes for SERVQUAL Weighted scores across all 13 dealerships

Table K2: Data Classes for SERVPERF Un-weighted scores across all 13 dealerships

Classes	Customer	Employee
Less than 1.00	0	0
Between 1.01 and 2.00	2	0
Between 2.01 and 3.00	4	0
Between 3.01 and 4.00	12	0
Between 4.01 and 5.00	42	7
Between 5.01 and 6.00	170	24
Between 6.01 and 7.00	226	51
TOTAL	456	82

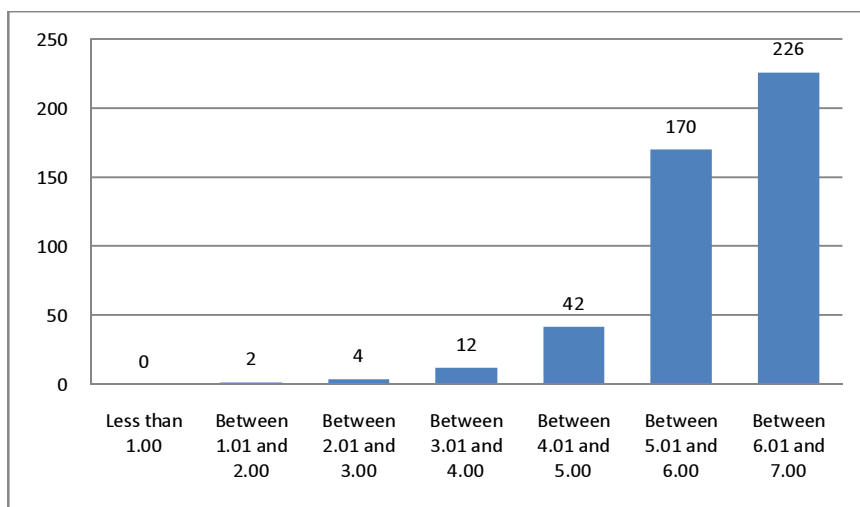


Figure K3: Customer Classes for SERVPERF Un-weighted scores across all 13 dealerships

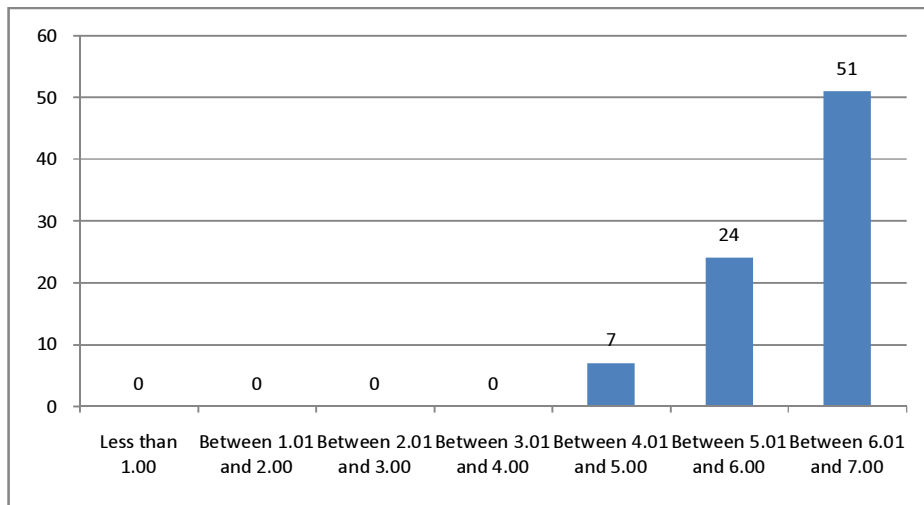


Figure K4: Employee Classes for SERVPERF Un-weighted scores across all 13 dealerships

Table K3: Data Classes for SERVPERF Weighted scores across all 13 dealerships

Classes	Customer	Employee
Less than 1.00	0	0
Between 1.01 and 2.00	5	0
Between 2.01 and 3.00	2	0
Between 3.01 and 4.00	16	1
Between 4.01 and 5.00	47	6
Between 5.01 and 6.00	164	24
Between 6.01 and 7.00	222	51
TOTAL	456	82

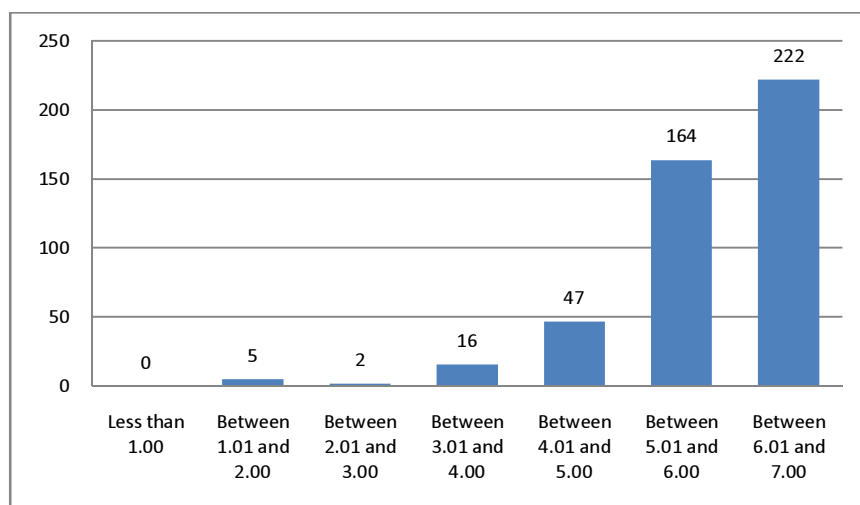


Figure K5: Customer Classes for SERVPERF Weighted scores across all 13 dealerships

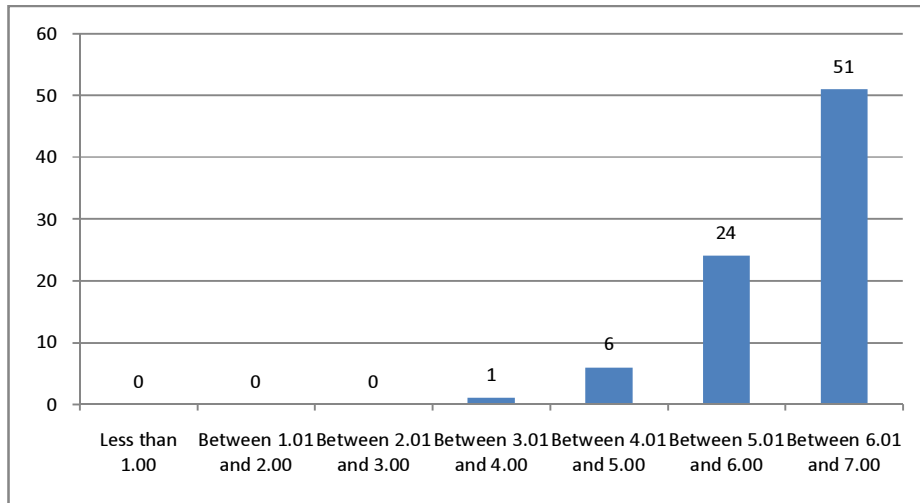


Figure K6: Employee Classes for SERVPERF Weighted scores across all 13 dealerships

9.12 Appendix L – Customer-Employee Comparison Graphs

In the following appendix the graphs showing the measured gap/difference for the customer-employee score comparison for each of the SERVQUAL and SERVPERF dimensions can be found. The graphs for SERVQUAL and SERVPERF un-weighted and weighted also appear in this appendix.

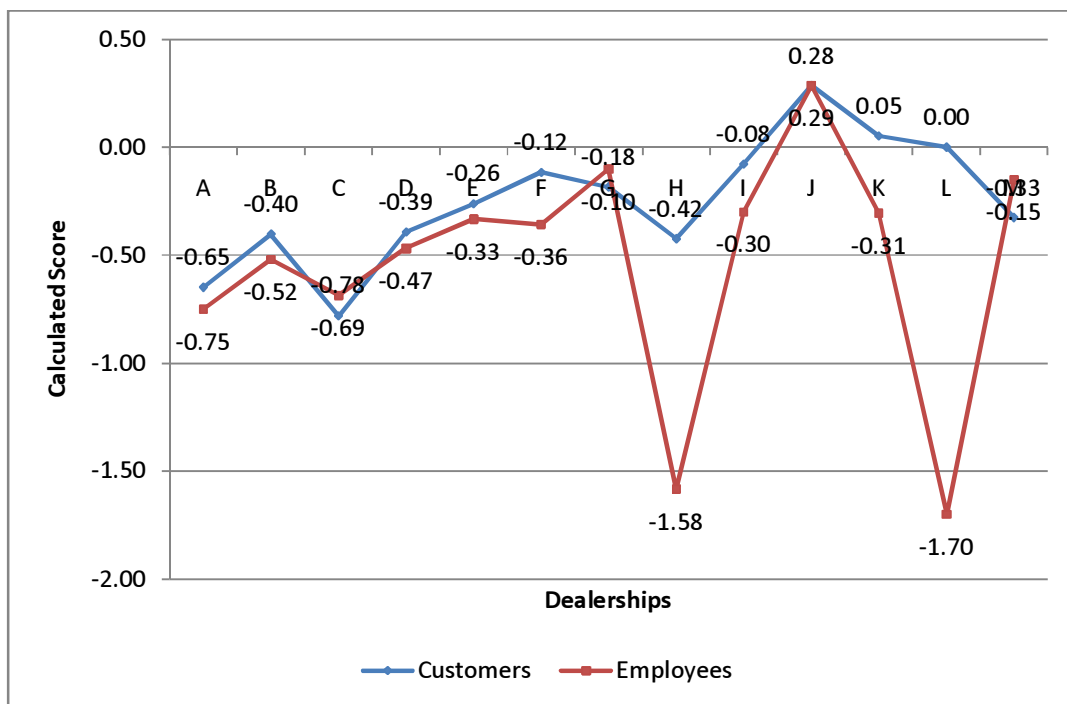


Figure L1: Customer-employee Score Comparison Chart for SERVQUAL Tangibles Dimension

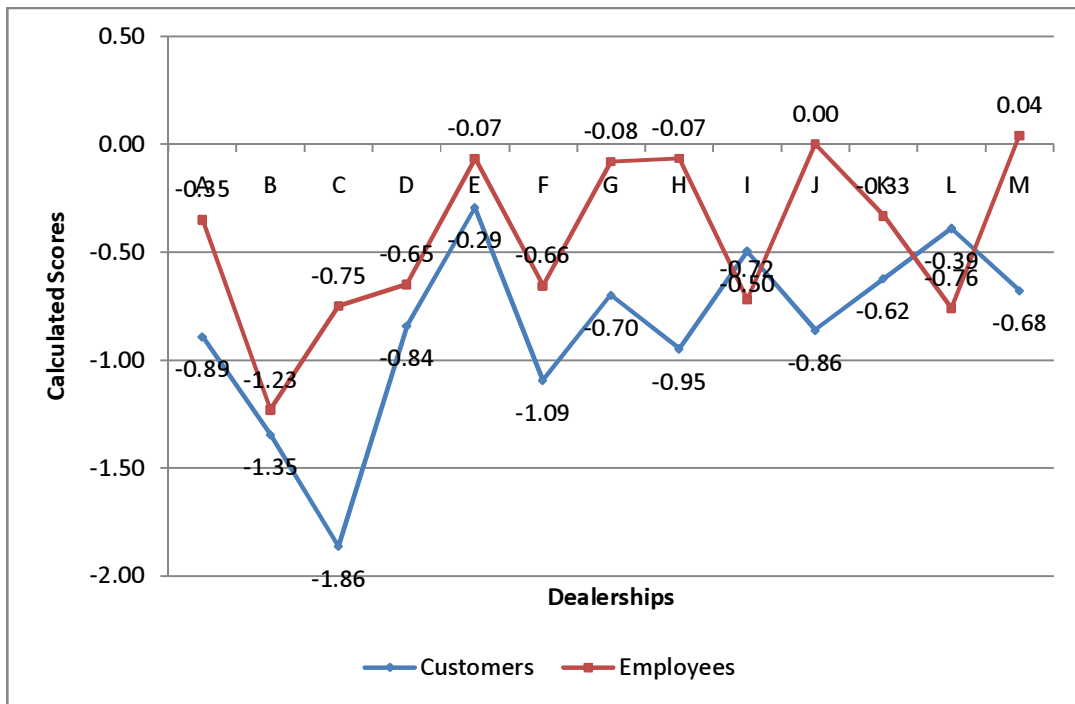


Figure L2: Customer-employee Score Comparison Chart for SERVQUAL Reliability Dimension



Figure L3: Customer-employee Score Comparison Chart for SERVQUAL Responsiveness Dimension

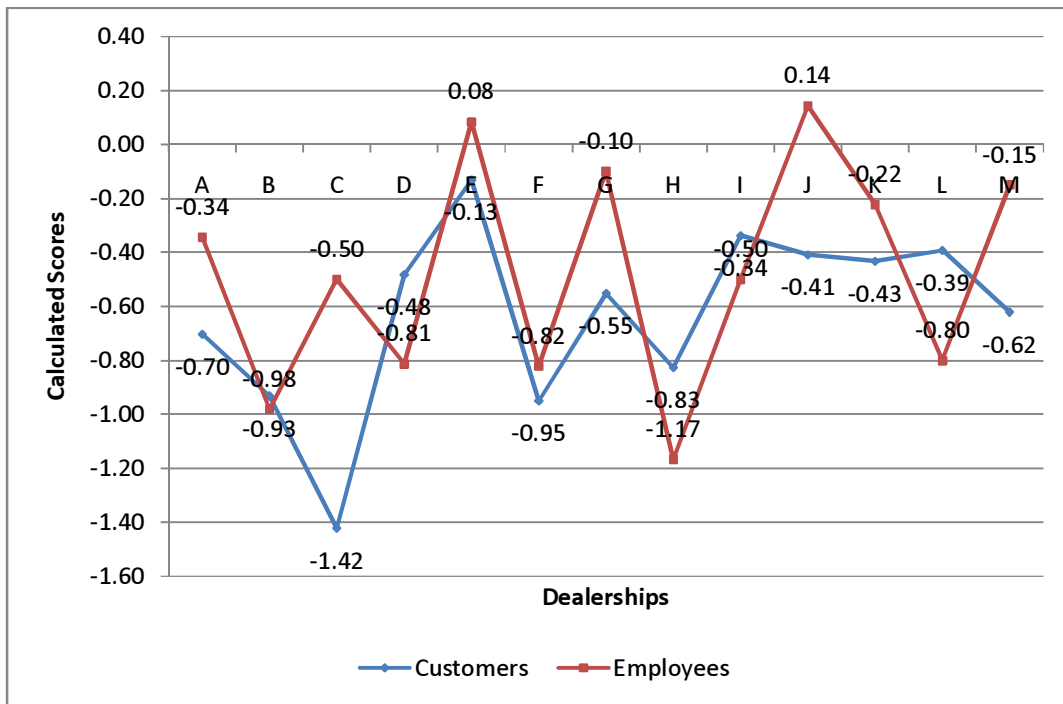


Figure L4: Customer-employee Score Comparison Chart for SERVQUAL Assurance Dimension

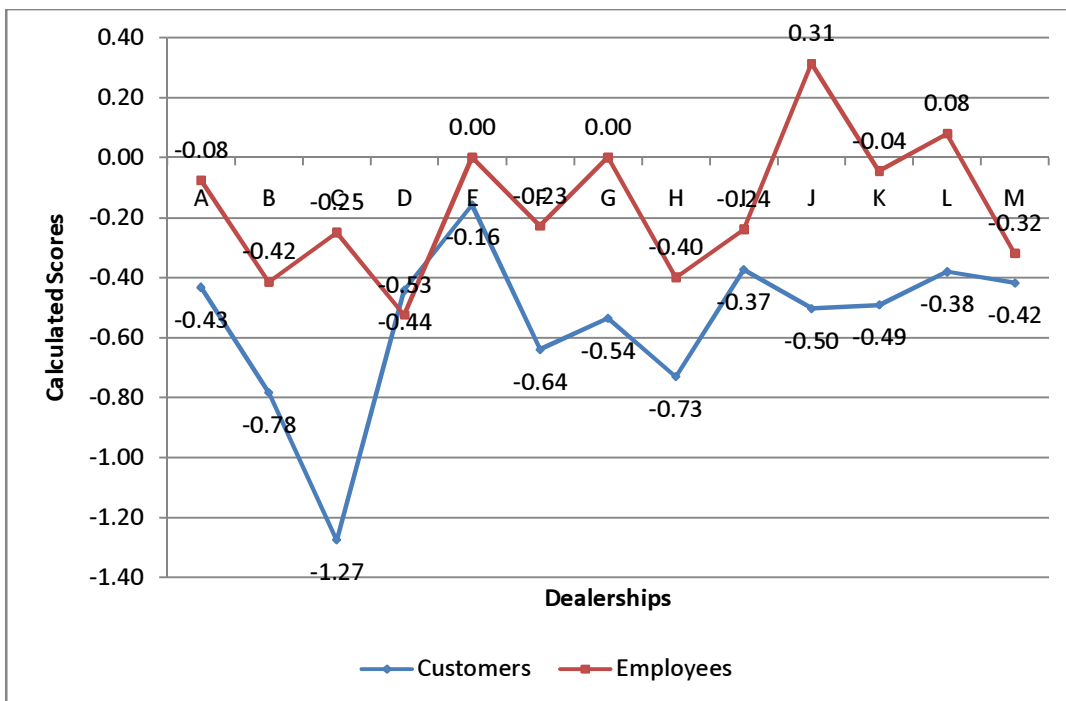


Figure L5: Customer-employee Score Comparison Chart for SERVQUAL Empathy Dimension

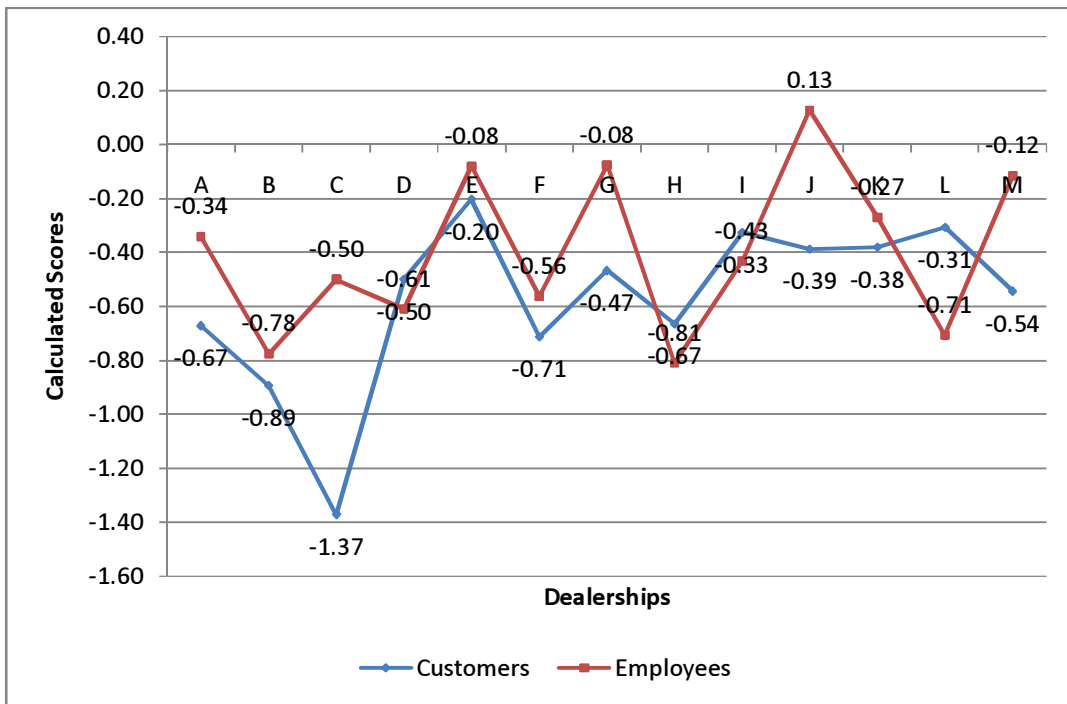


Figure L6: Customer-employee Score Comparison Chart for SERVQUAL Un-weighted Score

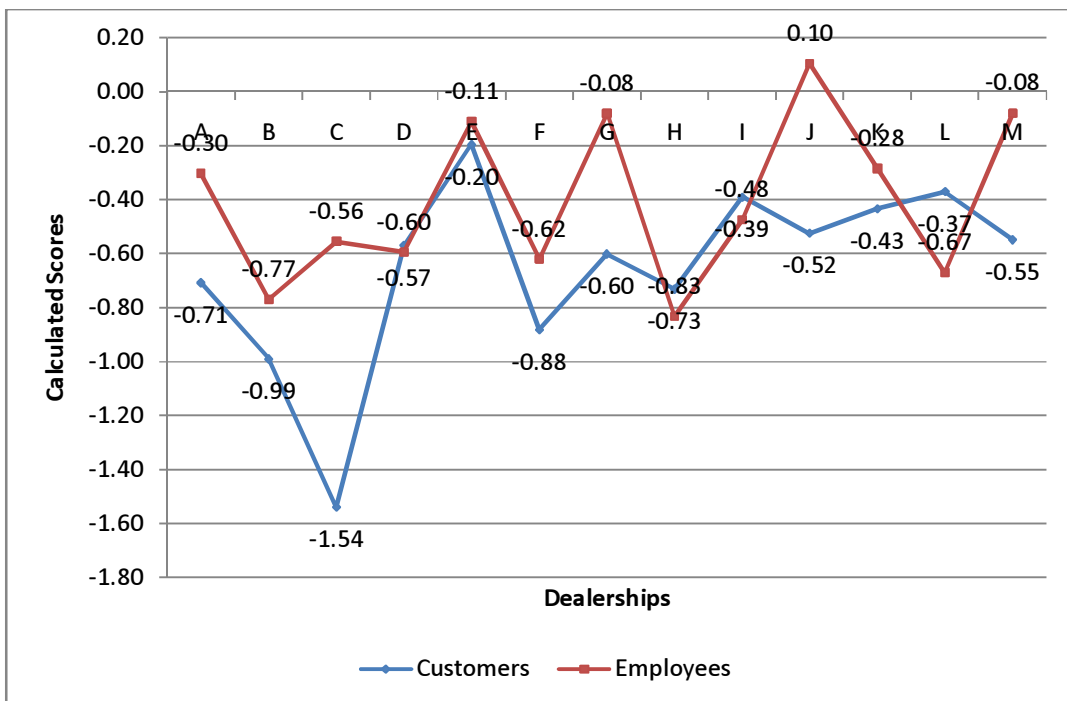


Figure L7: Customer-employee Score Comparison Chart for SERVQUAL Weighted Score

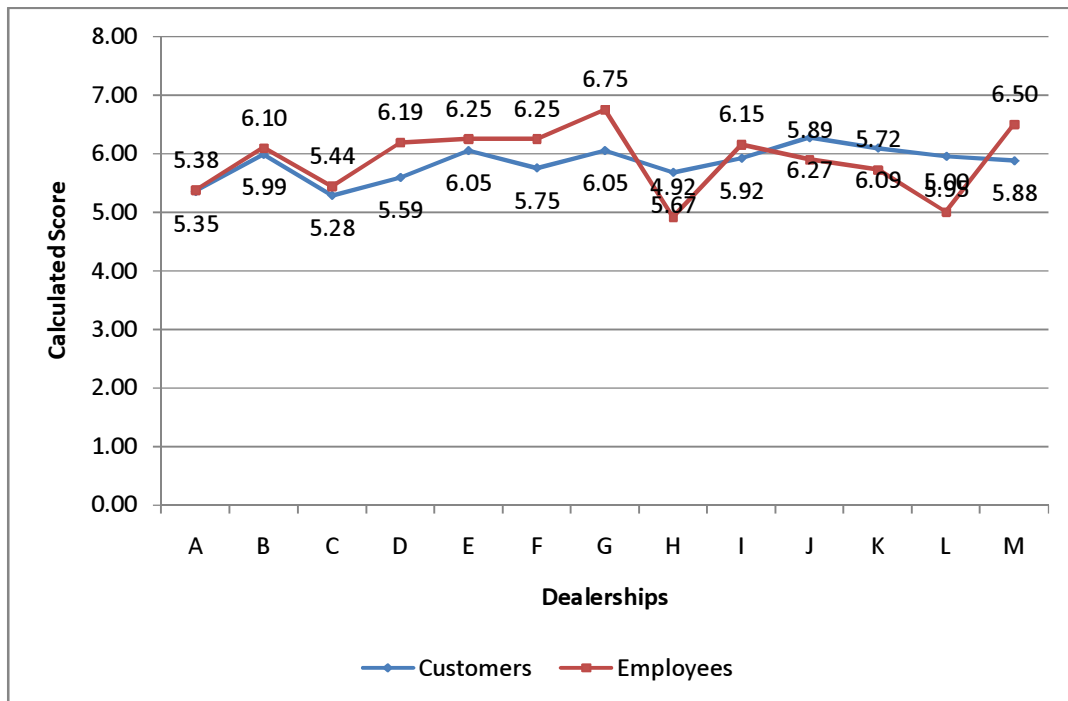


Figure L8: Customer-employee Score Comparison Chart for SERVPERF Tangibles Dimension

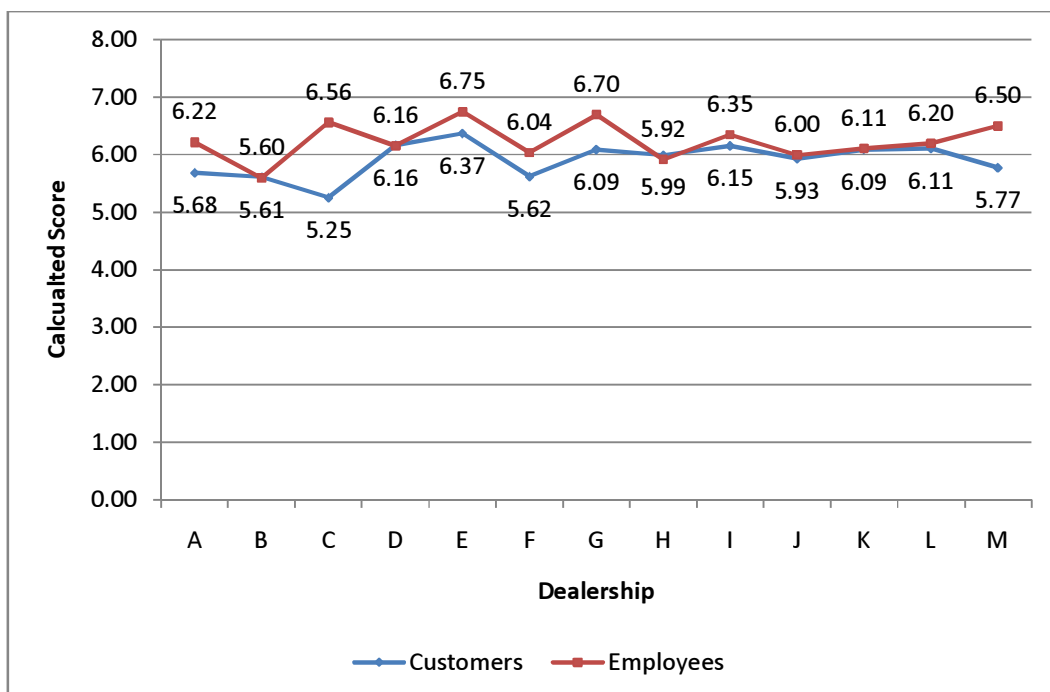


Figure L9: Customer-employee Score Comparison Chart for SERVPERF Responsiveness Dimension

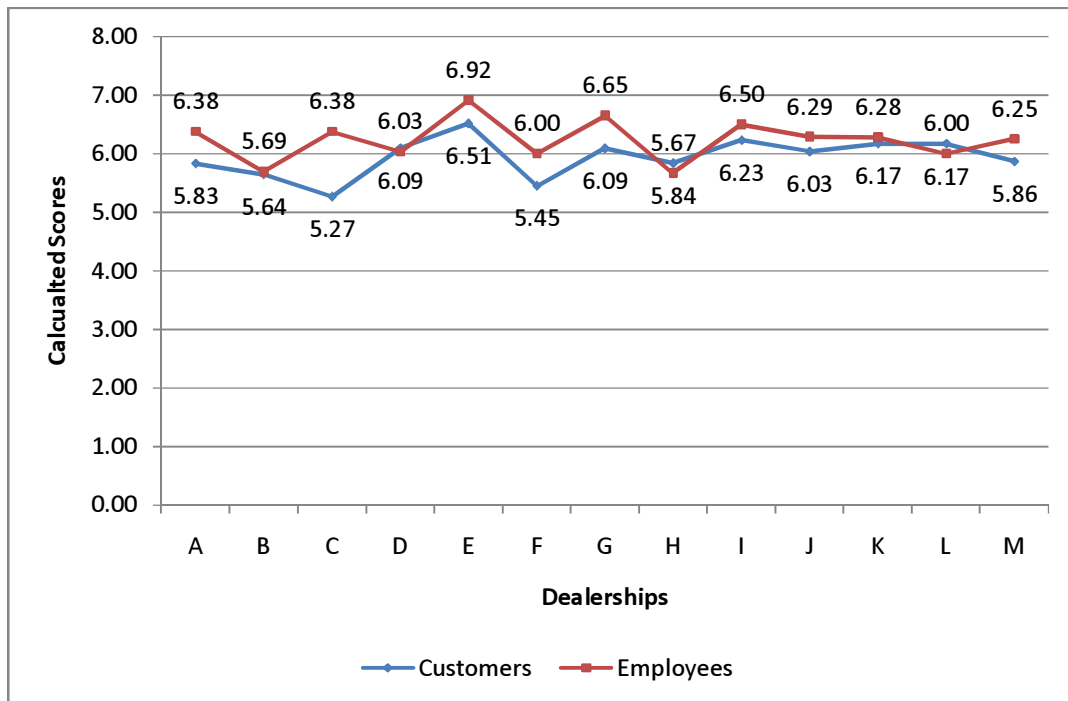


Figure L10: Customer-employee Score Comparison Chart for SERVPERF Assurance Dimension

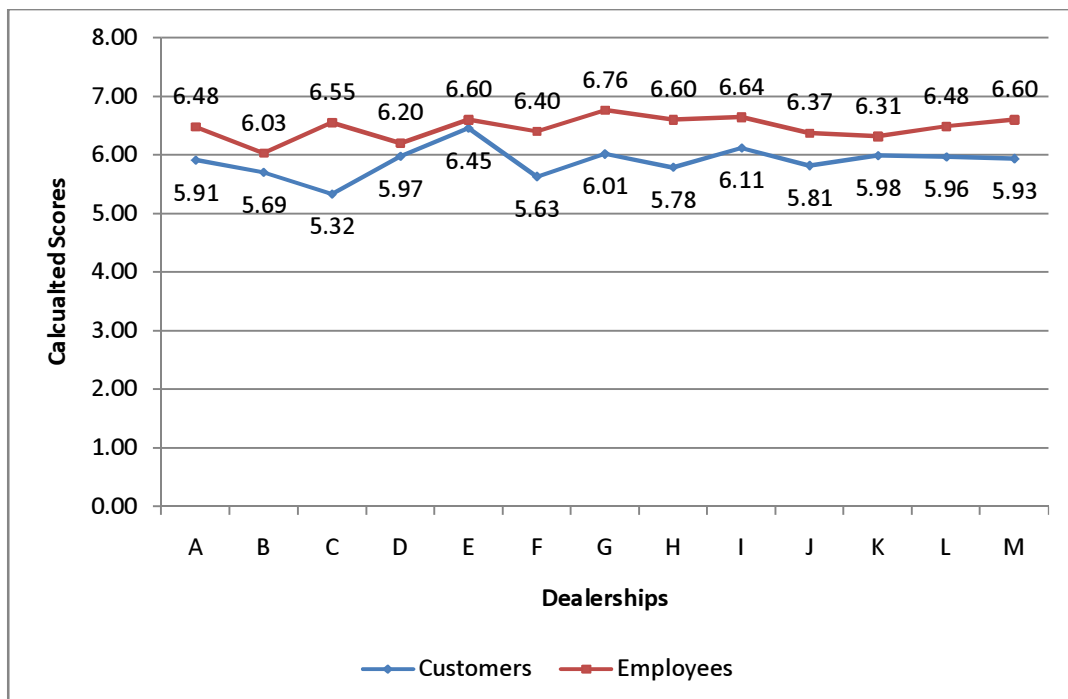


Figure L11: Customer-employee Score Comparison Chart for SERVPERF Empathy Dimension

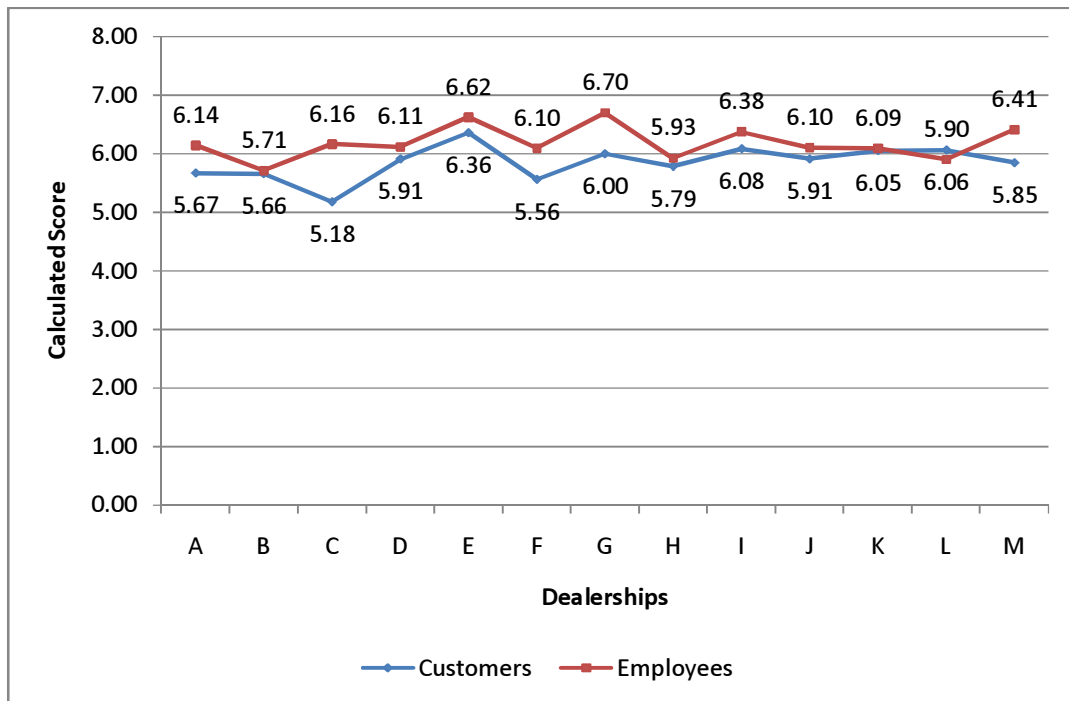


Figure L12: Customer-employee Score Comparison Chart for SERVPERF Un-weighted Score

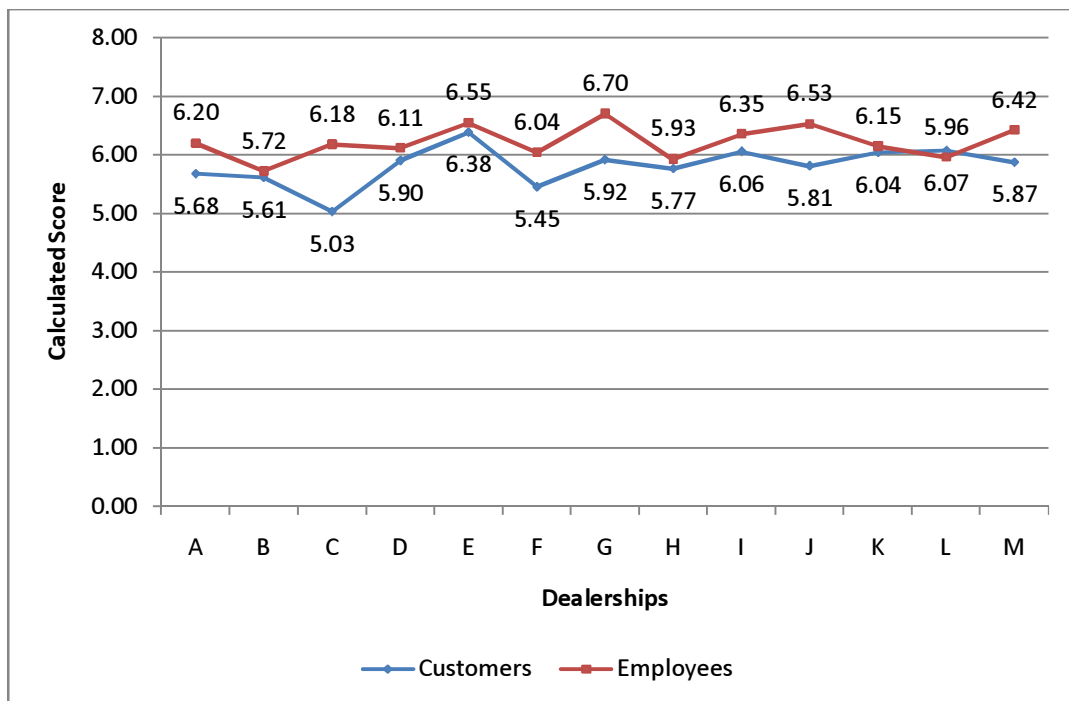


Figure L13: Customer-employee Score Comparison Chart for SERVPERF Weighted Score

9.13 Appendix M – Data for SERVPERF Percentage Conversion

The Tables shown in this Appendix contain the data used to generate the results found in Table 5.36. this data was used to perform the comparison between SERVPERF Un-weighted and Weighted percentage converted scores and the measures used in industry: Synovate and JD Powers and Associates.

Table M1: SERVPERF Un-weighted Data for Dealerships A, B, D and E in Percentage Form

	Dealership A		Dealership B		Dealership D		Dealership E	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	5.79	82.71%	4.77	68.14%	6.02	86.00%	6.90	98.57%
Customer 2	4.88	69.71%	6.45	92.14%	5.89	84.14%	6.35	90.71%
Customer 3	6.62	94.57%	7.00	100.00%	5.91	84.43%	5.52	78.86%
Customer 4	6.92	98.86%	6.62	94.57%	5.77	82.43%	5.66	80.86%
Customer 5	5.98	85.43%	4.97	71.00%	6.22	88.86%	5.95	85.00%
Customer 6	6.60	94.29%	5.31	75.86%	5.10	72.86%	5.91	84.43%
Customer 7	3.45	49.29%	5.57	79.57%	6.38	91.14%	6.54	93.43%
Customer 8	5.41	77.29%	5.90	84.29%	6.39	91.29%	6.00	85.71%
Customer 9	5.51	78.71%	5.67	81.00%	6.86	98.00%	6.30	90.00%
Customer 10	5.19	74.14%	6.84	97.71%	6.23	89.00%	5.86	83.71%
Customer 11	6.86	98.00%	6.05	86.43%	6.42	91.71%	7.00	100.00%
Customer 12	5.30	75.71%	6.11	87.29%	3.74	53.43%	6.69	95.57%
Customer 13	6.27	89.57%	5.20	74.29%	7.00	100.00%	5.94	84.86%
Customer 14	6.56	93.71%	5.86	83.71%	5.35	76.43%	5.53	79.00%
Customer 15	6.56	93.71%	2.30	32.86%	7.00	100.00%	7.00	100.00%
Customer 16	6.28	89.71%	6.73	96.14%	6.09	87.00%	6.68	95.43%
Customer 17	5.72	81.71%	6.64	94.86%	6.00	85.71%	7.00	100.00%
Customer 18	4.91	70.14%	6.18	88.29%	6.70	95.71%	7.00	100.00%
Customer 19	4.56	65.14%	6.40	91.43%	5.55	79.29%	7.00	100.00%
Customer 20	5.88	84.00%	5.27	75.29%	6.10	87.14%		
Customer 21	5.92	84.57%	3.69	52.71%	2.19	31.29%		
Customer 22	6.50	92.86%	4.86	69.43%	7.00	100.00%		
Customer 23	6.04	86.29%	6.96	99.43%	4.38	62.57%		
Customer 24	6.75	96.43%	4.89	69.86%	7.00	100.00%		
Customer 25	3.44	49.14%	6.70	95.71%	5.30	75.71%		
Customer 26	6.41	91.57%	5.65	80.71%	7.00	100.00%		
Customer 27	6.22	88.86%	6.78	96.86%	5.18	74.00%		
Customer 28	2.20	31.43%	6.32	90.29%	6.61	94.43%		

Customer 29	5.23	74.71%	6.16	88.00%				
Customer 30	4.80	68.57%	7.00	100.00%				
Customer 31	5.23	74.71%	6.39	91.29%				
Customer 32	4.76	68.00%	6.51	93.00%				
Customer 33	5.97	85.29%	5.57	79.57%				
Customer 34	5.62	80.29%	3.44	49.14%				
Customer 35	6.71	95.86%	5.55	79.29%				
Customer 36	6.56	93.71%	7.00	100.00%				
Customer 37	6.03	86.14%	5.12	73.14%				
Customer 38			6.08	86.86%				
Customer 39			4.68	66.86%				
Customer 40			5.03	71.86%				
Customer 41			3.42	48.86%				
Customer 42			6.46	92.29%				
Customer 43			5.72	81.71%				
Customer 44			5.11	73.00%				
Customer 45			6.65	95.00%				
Customer 46			5.00	71.43%				
Customer 47			6.04	86.29%				
Customer 48			5.53	79.00%				
Customer 49			5.11	73.00%				
Customer 50			6.66	95.14%				
Customer 51			4.19	59.86%				
Customer 52			6.51	93.00%				
Customer 53			7.00	100.00%				
Customer 54			4.40	62.86%				
Customer 55			6.59	94.14%				
Customer 56			5.09	72.71%				
Customer 57			5.28	75.43%				
Customer 58			3.23	46.14%				
Customer 59			5.75	82.14%				
Average		80.94%		80.86%		84.38%		90.85%

Table M2: SERVPERF Un-weighted Data for Dealerships F to I in Percentage Form

	Dealership F		Dealership G		Dealership H		Dealership I	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	6.68	95.43%	4.46	63.71%	6.30	90.00%	6.00	85.71%
Customer 2	5.40	77.14%	7.00	100.00%	4.55	65.00%	6.57	93.86%
Customer 3	5.66	80.86%	7.00	100.00%	7.00	100.00%	6.20	88.57%
Customer 4	5.73	81.86%	6.71	95.86%	6.12	87.43%	6.85	97.86%
Customer 5	6.77	96.71%	6.45	92.14%	5.37	76.71%	6.00	85.71%
Customer 6	5.44	77.71%	5.50	78.57%	5.31	75.86%	7.00	100.00%
Customer 7	5.01	71.57%	5.25	75.00%	5.24	74.86%	4.92	70.29%
Customer 8	6.87	98.14%	6.46	92.29%	6.04	86.29%	5.66	80.86%
Customer 9	5.18	74.00%	5.91	84.43%	6.38	91.14%	5.98	85.43%
Customer 10	6.63	94.71%	6.32	90.29%	4.30	61.43%	5.62	80.29%
Customer 11	1.91	27.29%	7.00	100.00%	6.47	92.43%	6.04	86.29%
Customer 12	4.29	61.29%	5.04	72.00%	6.39	91.29%	5.57	79.57%
Customer 13	6.03	86.14%	6.60	94.29%	5.98	85.43%	6.81	97.29%
Customer 14	5.49	78.43%	5.92	84.57%	5.85	83.57%	6.20	88.57%
Customer 15	6.36	90.86%	5.65	80.71%	6.18	88.29%	5.74	82.00%
Customer 16			5.53	79.00%	4.49	64.14%	6.72	96.00%
Customer 17			6.01	85.86%	5.48	78.29%	6.06	86.57%
Customer 18			6.26	89.43%	7.00	100.00%	5.06	72.29%
Customer 19			6.81	97.29%	5.26	75.14%	5.37	76.71%
Customer 20			6.58	94.00%	6.67	95.29%	5.92	84.57%
Customer 21			4.77	68.14%	7.00	100.00%	5.87	83.86%
Customer 22			5.93	84.71%	6.11	87.29%	5.87	83.86%
Customer 23			5.39	77.00%	3.57	51.00%	6.58	94.00%
Customer 24			4.17	59.57%			5.25	75.00%
Customer 25			6.96	99.43%			3.76	53.71%
Customer 26			7.00	100.00%			5.73	81.86%
Customer 27			6.15	87.86%			5.95	85.00%
Customer 28			6.76	96.57%			5.65	80.71%
Customer 29			6.01	85.86%			7.00	100.00%
Customer 30			5.42	77.43%			6.77	96.71%
Customer 31			6.00	85.71%			5.72	81.71%
Customer 32			6.05	86.43%			7.00	100.00%
Customer 33			5.06	72.29%			6.40	91.43%
Customer 34			5.86	83.71%			6.77	96.71%
Customer 35							5.84	83.43%
Customer 36							6.85	97.86%
Customer 37							6.21	88.71%

Customer 38							6.31	90.14%
Customer 39							6.21	88.71%
Customer 40							6.09	87.00%
Customer 41							5.36	76.57%
Customer 42							5.26	75.14%
Customer 43							6.49	92.71%
Customer 44							6.60	94.29%
Customer 45							5.95	85.00%
Customer 46							6.92	98.86%
Customer 47							6.39	91.29%
Customer 48							6.46	92.29%
Customer 49							5.63	80.43%
Customer 50							6.76	96.57%
Customer 51							6.00	85.71%
Customer 52							6.26	89.43%
Customer 53							6.14	87.71%
Customer 54							6.10	87.14%
Average		79.48%		85.71%		82.65%		86.89%

Table M3: SERVPERF Un-weighted Data for Dealerships J to M in Percentage Form

	Dealership J		Dealership K		Dealership L		Dealership M	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	6.45	92.14%	6.95	99.29%	6.00	85.71%	6.50	92.86%
Customer 2	6.91	98.71%	7.00	100.00%	3.39	48.43%	3.52	50.29%
Customer 3	6.83	97.57%	5.93	84.71%	4.77	68.14%	5.27	75.29%
Customer 4	4.88	69.71%	6.88	98.29%	5.84	83.43%	6.61	94.43%
Customer 5	5.45	77.86%	5.45	77.86%	7.00	100.00%	5.95	85.00%
Customer 6	5.67	81.00%	6.41	91.57%	6.24	89.14%	6.92	98.86%
Customer 7	6.57	93.86%	5.20	74.29%	6.92	98.86%	6.77	96.71%
Customer 8	6.29	89.86%	6.17	88.14%	6.96	99.43%	5.72	81.71%
Customer 9	5.29	75.57%	6.67	95.29%	6.56	93.71%	5.41	77.29%
Customer 10	5.35	76.43%	5.60	80.00%	5.36	76.57%	5.63	80.43%
Customer 11	4.38	62.57%	5.00	71.43%	6.44	92.00%	6.09	87.00%
Customer 12	5.57	79.57%	5.63	80.43%	5.97	85.29%	5.96	85.14%
Customer 13	6.50	92.86%	6.76	96.57%	6.48	92.57%	5.23	74.71%
Customer 14	4.47	63.86%	6.30	90.00%	6.41	91.57%	5.89	84.14%
Customer 15	6.57	93.86%	4.74	67.71%	5.01	71.57%	6.51	93.00%
Customer 16	6.61	94.43%	6.18	88.29%	6.69	95.57%	5.78	82.57%
Customer 17	6.28	89.71%	3.88	55.43%	5.54	79.14%	5.90	84.29%
Customer 18	5.93	84.71%	5.02	71.71%	6.95	99.29%	5.45	77.86%
Customer 19	6.02	86.00%	5.05	72.14%	6.95	99.29%	6.53	93.29%
Customer 20	5.66	80.86%	6.81	97.29%	5.75	82.14%	6.24	89.14%
Customer 21	6.96	99.43%	6.58	94.00%	6.04	86.29%	5.32	76.00%
Customer 22	5.39	77.00%	5.95	85.00%			4.93	70.43%
Customer 23	5.74	82.00%	5.94	84.86%			5.81	83.00%
Customer 24	5.36	76.57%	6.00	85.71%			6.53	93.29%
Customer 25	4.82	68.86%	7.00	100.00%			6.90	98.57%
Customer 26	5.29	75.57%	6.69	95.57%			6.59	94.14%
Customer 27	6.49	92.71%	6.27	89.57%			6.28	89.71%
Customer 28	6.73	96.14%	6.49	92.71%			6.52	93.14%
Customer 29	5.95	85.00%	5.43	77.57%			4.07	58.14%
Customer 30	6.64	94.86%	6.44	92.00%			5.01	71.57%
Customer 31	6.48	92.57%	4.91	70.14%			5.14	73.43%
Customer 32	6.66	95.14%	4.95	70.71%			5.99	85.57%
Customer 33	6.38	91.14%	5.94	84.86%			5.99	85.57%
Customer 34	5.20	74.29%	5.82	83.14%				
Customer 35	6.23	89.00%	5.19	74.14%				
Customer 36	6.02	86.00%	7.00	100.00%				

Customer 37	6.90	98.57%	5.93	84.71%				
Customer 38	4.06	58.00%	5.42	77.43%				
Customer 39	5.58	79.71%	6.87	98.14%				
Customer 40	6.76	96.57%	6.84	97.71%				
Customer 41	5.42	77.43%	6.95	99.29%				
Customer 42	6.04	86.29%	4.76	68.00%				
Customer 43	4.56	65.14%	6.33	90.43%				
Customer 44	6.87	98.14%	5.43	77.57%				
Customer 45	4.73	67.57%	5.77	82.43%				
Customer 46	5.12	73.14%	5.68	81.14%				
Customer 47	6.25	89.29%	6.21	88.71%				
Customer 48	6.38	91.14%	6.15	87.86%				
Customer 49	5.77	82.43%	6.38	91.14%				
Customer 50	5.29	75.57%	5.84	83.43%				
Customer 51	7.00	100.00%	5.96	85.14%				
Customer 52	6.01	85.86%	6.80	97.14%				
Customer 53	6.95	99.29%	6.95	99.29%				
Customer 54	5.10	72.86%	6.37	91.00%				
Customer 55	5.46	78.00%	6.49	92.71%				
Customer 56	5.64	80.57%	6.39	91.29%				
Customer 57	6.07	86.71%	6.24	89.14%				
Customer 58	7.00	100.00%	6.64	94.86%				
Customer 59			6.36	90.86%				
Average		84.48%		86.44%		86.58%		83.53%

Table M4: SERVPERF Weighted Data for Dealerships A, B, D and E in Percentage Form

	Dealership A		Dealership B		Dealership D		Dealership E	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	5.79	82.71%	4.59	65.57%	5.96	85.07%	6.96	99.46%
Customer 2	4.95	70.68%	6.55	93.57%	5.88	84.04%	6.36	90.82%
Customer 3	6.62	94.57%	7.00	100.00%	6.00	85.68%	6.10	87.14%
Customer 4	6.93	98.97%	6.54	93.43%	5.77	82.43%	5.74	81.93%
Customer 5	6.09	87.00%	4.79	68.43%	6.30	89.93%	5.98	85.36%
Customer 6	6.60	94.29%	5.31	75.86%	4.98	71.07%	5.94	84.79%
Customer 7	3.45	49.29%	5.11	73.04%	6.37	91.00%	6.53	93.29%
Customer 8	5.39	77.00%	5.98	85.36%	6.33	90.36%	5.94	84.89%
Customer 9	5.36	76.57%	5.46	77.93%	6.85	97.86%	6.13	87.57%
Customer 10	4.19	59.86%	6.78	96.86%	6.45	92.18%	5.83	83.32%
Customer 11	6.86	98.00%	5.99	85.57%	6.45	92.11%	7.00	100.00%
Customer 12	5.30	75.71%	6.07	86.64%	3.68	52.50%	6.66	95.07%
Customer 13	6.34	90.50%	5.09	72.75%	7.00	100.00%	5.98	85.43%
Customer 14	6.53	93.34%	5.07	72.36%	5.26	75.18%	5.53	79.00%
Customer 15	6.56	93.71%	2.30	32.86%	7.00	100.00%	7.00	100.00%
Customer 16	6.33	90.46%	6.79	97.00%	6.12	87.39%	6.65	94.93%
Customer 17	5.78	82.57%	6.63	94.64%	6.15	87.86%	7.00	100.00%
Customer 18	4.92	70.25%	5.64	80.61%	6.85	97.86%	7.00	100.00%
Customer 19	4.73	67.54%	6.42	91.75%	5.60	80.04%	7.00	100.00%
Customer 20	5.92	84.61%	4.94	70.50%	6.28	89.64%		
Customer 21	6.15	87.86%	3.63	51.89%	1.82	25.96%		
Customer 22	6.50	92.86%	5.10	72.79%	7.00	100.00%		
Customer 23	6.32	90.29%	6.96	99.43%	4.12	58.86%		
Customer 24	6.75	96.43%	4.90	70.01%	7.00	100.00%		
Customer 25	3.44	49.14%	6.65	94.93%	5.25	75.00%		
Customer 26	6.34	90.50%	5.73	81.79%	7.00	100.00%		
Customer 27	6.01	85.86%	6.89	98.43%	5.19	74.14%		
Customer 28	1.74	24.89%	6.46	92.29%	6.61	94.43%		
Customer 29	5.21	74.43%	6.22	88.86%				
Customer 30	4.90	70.00%	7.00	100.00%				
Customer 31	5.26	75.14%	6.39	91.29%				
Customer 32	5.35	76.36%	6.32	90.29%				
Customer 33	5.91	84.36%	5.67	81.04%				
Customer 34	5.73	81.89%	3.05	43.50%				
Customer 35	6.85	97.86%	5.78	82.57%				
Customer 36	6.56	93.71%	7.00	100.00%				
Customer 37	6.40	91.39%	5.01	71.57%				

Customer 38			6.26	89.36%				
Customer 39			4.33	61.79%				
Customer 40			5.06	72.25%				
Customer 41			2.82	40.21%				
Customer 42			6.56	93.75%				
Customer 43			5.62	80.29%				
Customer 44			5.23	74.64%				
Customer 45			6.58	94.00%				
Customer 46			5.18	74.01%				
Customer 47			6.14	87.68%				
Customer 48			5.51	78.75%				
Customer 49			4.99	71.21%				
Customer 50			6.83	97.57%				
Customer 51			4.57	65.25%				
Customer 52			6.85	97.89%				
Customer 53			7.00	100.00%				
Customer 54			4.15	59.29%				
Customer 55			6.59	94.14%				
Customer 56			4.60	65.64%				
Customer 57			5.46	78.00%				
Customer 58			3.22	45.93%				
Customer 59			5.91	84.43%				
Average		81.10%		80.19%		84.31%		91.21%

Table M5: SERVPERF Weighted Data for Dealerships F to I in Percentage Form

	Dealership F		Dealership G		Dealership H		Dealership I	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	6.86	98.00%	4.53	64.68%	6.55	93.57%	6.00	85.71%
Customer 2	5.21	74.36%	7.00	100.00%	4.60	65.68%	6.36	90.86%
Customer 3	5.50	78.50%	7.00	100.00%	7.00	100.00%	6.12	87.36%
Customer 4	5.91	84.43%	6.76	96.50%	6.12	87.43%	6.96	99.46%
Customer 5	6.77	96.71%	6.48	92.57%	5.13	73.21%	6.00	85.71%
Customer 6	5.52	78.86%	5.50	78.57%	5.39	76.93%	7.00	100.00%
Customer 7	4.94	70.57%	5.19	74.14%	5.12	73.14%	4.96	70.86%
Customer 8	6.75	96.43%	6.27	89.50%	6.14	87.75%	5.59	79.86%
Customer 9	5.22	74.50%	5.62	80.29%	6.53	93.29%	5.89	84.14%
Customer 10	6.69	95.50%	6.34	90.57%	4.41	63.04%	5.25	75.00%
Customer 11	1.79	25.57%	7.00	100.00%	6.47	92.43%	6.30	90.00%
Customer 12	3.38	48.25%	5.05	72.14%	6.39	91.29%	5.39	77.00%
Customer 13	5.78	82.50%	6.50	92.86%	5.47	78.07%	6.73	96.14%
Customer 14	5.15	73.50%	5.92	84.57%	5.82	83.07%	6.15	87.86%
Customer 15	6.36	90.86%	5.74	82.04%	6.25	89.29%	5.53	78.93%
Customer 16			5.51	78.75%	4.14	59.14%	6.65	95.00%
Customer 17			5.80	82.82%	5.45	77.86%	6.06	86.50%
Customer 18			6.26	89.43%	7.00	100.00%	4.90	70.00%
Customer 19			6.81	97.29%	5.27	75.29%	5.41	77.29%
Customer 20			6.69	95.57%	6.65	95.00%	5.86	83.71%
Customer 21			3.60	51.41%	7.00	100.00%	5.96	85.14%
Customer 22			5.58	79.64%	6.01	85.79%	5.87	83.86%
Customer 23			5.27	75.29%	3.76	53.71%	6.00	85.64%
Customer 24			3.56	50.89%			4.93	70.36%
Customer 25			6.90	98.57%			3.19	45.57%
Customer 26			7.00	100.00%			5.70	81.36%
Customer 27			6.17	88.18%			5.88	83.93%
Customer 28			6.46	92.29%			5.65	80.71%
Customer 29			6.04	86.21%			7.00	100.00%
Customer 30			5.41	77.32%			6.81	97.21%
Customer 31			6.00	85.71%			5.76	82.32%
Customer 32			6.29	89.82%			7.00	100.00%
Customer 33			5.00	71.36%			6.38	91.11%
Customer 34			5.95	84.93%			6.79	96.93%
Customer 35							5.96	85.14%
Customer 36							6.96	99.46%
Customer 37							6.83	97.54%

Customer 38							6.31	90.14%
Customer 39							6.21	88.75%
Customer 40							6.26	89.43%
Customer 41							5.45	77.79%
Customer 42							5.55	79.29%
Customer 43							6.49	92.71%
Customer 44							6.56	93.68%
Customer 45							6.00	85.71%
Customer 46							6.92	98.86%
Customer 47							6.38	91.14%
Customer 48							6.51	92.93%
Customer 49							5.61	80.18%
Customer 50							6.82	97.43%
Customer 51							6.00	85.71%
Customer 52							6.29	89.86%
Customer 53							6.11	87.21%
Customer 54							6.00	85.71%
Average		77.90%		84.53%		82.39%		86.56%

Table M6: SERVPERF Weighted Data for Dealerships J to M in Percentage Form

	Dealership J		Dealership K		Dealership L		Dealership M	
	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage	SERVPERF Un-weighted score	Percentage
Customer 1	6.52	93.07%	6.93	98.93%	5.85	83.57%	6.45	92.11%
Customer 2	6.95	99.32%	7.00	100.00%	3.46	49.43%	3.66	52.21%
Customer 3	6.87	98.18%	6.15	87.79%	4.61	65.82%	5.20	74.29%
Customer 4	4.94	70.61%	6.82	97.43%	5.69	81.29%	6.64	94.79%
Customer 5	5.46	78.04%	5.44	77.64%	7.00	100.00%	6.00	85.71%
Customer 6	5.90	84.29%	6.47	92.39%	6.33	90.46%	6.92	98.86%
Customer 7	6.54	93.46%	5.30	75.71%	6.92	98.86%	6.78	96.90%
Customer 8	6.09	87.00%	6.04	86.21%	6.95	99.29%	5.70	81.46%
Customer 9	4.85	69.29%	6.67	95.29%	6.68	95.43%	5.43	77.61%
Customer 10	5.52	78.84%	5.99	85.61%	5.45	77.86%	6.00	85.75%
Customer 11	4.09	58.36%	5.01	71.61%	6.45	92.14%	5.93	84.71%
Customer 12	5.57	79.57%	5.63	80.43%	6.13	87.54%	6.06	86.57%
Customer 13	6.31	90.18%	6.88	98.29%	6.43	91.86%	5.07	72.36%
Customer 14	4.16	59.36%	5.95	85.00%	6.48	92.57%	5.76	82.25%
Customer 15	6.60	94.29%	4.27	61.00%	4.83	69.04%	6.53	93.21%
Customer 16	6.69	95.57%	6.31	90.14%	6.71	95.79%	6.01	85.89%
Customer 17	6.36	90.82%	3.40	48.57%	5.87	83.86%	5.98	85.36%
Customer 18	5.83	83.25%	4.91	70.14%	6.95	99.29%	5.46	78.04%
Customer 19	6.07	86.64%	5.05	72.14%	6.99	99.82%	6.67	95.21%
Customer 20	5.02	71.71%	6.97	99.57%	5.77	82.39%	6.34	90.54%
Customer 21	6.96	99.43%	6.53	93.25%	5.99	85.57%	5.36	76.57%
Customer 22	5.38	76.86%	5.98	85.36%			4.86	69.43%
Customer 23	5.57	79.57%	6.16	88.00%			5.91	84.36%
Customer 24	5.44	77.64%	6.00	85.75%			6.53	93.29%
Customer 25	4.20	60.00%	7.00	100.00%			6.94	99.11%
Customer 26	5.16	73.71%	6.71	95.79%			6.61	94.36%
Customer 27	6.45	92.16%	6.45	92.11%			6.25	89.29%
Customer 28	6.72	95.93%	6.44	91.93%			6.42	91.71%
Customer 29	5.98	85.36%	5.44	77.67%			4.14	59.11%
Customer 30	6.49	92.68%	6.72	96.00%			4.89	69.79%
Customer 31	6.24	89.14%	4.81	68.68%			5.13	73.21%
Customer 32	6.81	97.21%	4.99	71.25%			6.09	87.00%
Customer 33	6.38	91.14%	5.97	85.25%			6.06	86.54%
Customer 34	4.89	69.79%	5.95	84.93%				
Customer 35	6.24	89.18%	5.18	73.96%				
Customer 36	5.90	84.21%	7.00	100.00%				
Customer 37	6.95	99.29%	5.91	84.46%				

Customer 38	3.86	55.14%	5.00	71.43%				
Customer 39	5.63	80.36%	6.86	98.00%				
Customer 40	6.38	91.09%	6.83	97.57%				
Customer 41	5.03	71.79%	6.98	99.64%				
Customer 42	5.82	83.07%	4.87	69.57%				
Customer 43	4.01	57.29%	6.31	90.11%				
Customer 44	6.91	98.71%	5.36	76.50%				
Customer 45	4.36	62.29%	5.79	82.64%				
Customer 46	5.04	71.96%	5.62	80.29%				
Customer 47	6.13	87.50%	5.87	83.82%				
Customer 48	6.27	89.57%	6.38	91.07%				
Customer 49	5.71	81.50%	6.09	87.00%				
Customer 50	5.19	74.18%	5.66	80.79%				
Customer 51	7.00	100.00%	6.02	86.00%				
Customer 52	5.81	82.93%	6.80	97.14%				
Customer 53	6.96	99.46%	6.99	99.82%				
Customer 54	5.10	72.86%	6.38	91.14%				
Customer 55	5.32	75.96%	6.61	94.36%				
Customer 56	5.66	80.79%	6.40	91.43%				
Customer 57	5.92	84.50%	6.18	88.21%				
Customer 58	7.00	100.00%	6.60	94.29%				
Customer 59			6.56	93.73%				
Average		83.04%		86.32%		86.76%		83.87%