UNIFIED SERVICES THEORY AND PERCEIVED SERVICE QUALITY IN THE HOSPITALITY SECTOR NAIROBI COUNTY

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DECLARATION

I, the undersigned, hereby declare that this research project is my original work and has not been presented or published for the award of any degree in this or any other university

Sign: ……. Date: ……

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This research project has been submitted for examination with my approval as a University supervisor

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DEDICATION

To

My

Husband

Paul Njiru Ngandu

ACKNOWLEDGEMENT

First and foremost is to my master for his continued strength and grace this far. All glory to Jesus.

Special thanks to my supervisor Dr. Okwiri Owino for his guidance, commitment, patience and humility throughout the study.

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My children Aryanna Njiru and Fabrice Njiru, who have been a source of joy, inspiration and a precious gift from God.

My family and friends for sustained concern up to this moment

My houses help Jane Njoki Mwaniki for great understanding, peace of mind and cooperation, especially when it was called for in my entire period of study.

Last but not least is all those who helped me to fill the Questionnaires.

To all these, I say a big thank you and God bless you.

ABSTRACT

This was a study on unified services theory as a framework for perceived service quality in the hospitality sector in Nairobi County. Collected data was analyzed using descriptive analysis. Correlation of the data revealed that unified services theory acts as a framework for perceived service quality in the hospitality sector in the sense that customer supplied inputs including labour, and quality control method adopted influence quality of service delivered in this sector. Further, regression analysis revealed that customer supplied inputs and labour, moderated by quality control method adopted had an insignificant influence on perceived service quality. This implies that any effect arising from these two concepts would be due to their interaction during the service process operations.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Operations management is the area of management concerned with overseeing, designing and controlling the process of production and re-designing business operations in the production of goods and services (Chase et. al, 2006). It involves ensuring that business operations are efficient in terms of using as few resources as needed, and effective in terms of meeting customers' requirements (Hoffman and Bateson 2010). It is concerned with managing the process that converts inputs (in the form of raw materials, labour and energy) into outputs which can be tangible goods or services. In the services processes, customer inputs refers to inputs to be used in the specific customers units of production, and not the general customer sentiments about the overall process or general product.

Scotts (2008) argues that when the outcomes are tangible goods, then involvement is restricted to operations services employees only. However, for services as outcomes, the transformation process is open and requires involvement of the customer. As such, people's skills, creativity, rational analysis and knowledge of technology are all required for success. The arguments are that managing services involves the customer providing significant inputs into the production process (Richard 2009), by supplying self, belongings or information as process inputs. The customer is not only a consumer of outputs, but also a supplier of inputs which include labour. Understanding how these inputs influence what comes out of this different context of service activities is made clear by the unified services theory.

1.1.1 The Unified Service Theory

Unified services theory delineates services processes from non services processes and acts as a fundamental unifying principle by identifying and revealing key commonalities across seemingly desperate service businesses (Springer 2010). The theory reveals principles that are common to a wide range of services and provides a unifying foundation for various theories and models for service operations (Scotts 2008). Such includes the traditional 'characteristics of services' and customer contact theory (Scotts, 2008; Chase 1981), operational outcomes pertaining to capacity and demand management, service quality, service strategy among others (Scotts and Craig 2006). These are clarified using unified services theory. The theory has been used in the curricular and also provides a common reference point to which service management researchers can anchor future theory building and theory testing research.

The foundation of Unified services theory is that customers are involved in production as suppliers. They supply inputs as well as labour. As a result, issues of quality and improvements must affect and be affected by the customer in their varying roles. Scotts (2008) identifies implications of this involvement as: Unreliable supplier dilemma, Everyone thinks he/she is an expert ,Capricious labour and Unforgiving product syndrome.

The unreliable supplier dilemma is based on the argument that the customer, who is also the supplier (dilemma), often provides unreliable inputs (supplying self, belongings), or information (Maurice and Corien 2006). It therefore becomes difficult for the service provider to control the supplied inputs which determine the outcome of the service production process (Scotts 2008). This issues calls for actions such as training the customer to be a better supplier, having exceptions handling process if the

service involves standardized procedures, controlling or reducing customer input, and providing a structure in the receipt of inputs such as confirming against a checklist.

Everyone thinks he/she is an expert is based on the ideology that the customer influences the service production process (Gronroos 2010), often without the invitation of the service provider. Despite the expertise, the customers may not understand the complexities of implementing a given quality improvement suggestion (Scotts 2008). Action towards addressing this implication calls for observing the manner in which solicited and unsolicited suggestions from the customer are acknowledged, appreciating every suggestion and responding to the customers suggestions systematically and lastly, putting more value in listening rather than implementing the suggested improvements.

Capricious labour implies that customer-labor may ignore, avoid, or reject technologies/ process improvements intended to increase quality and productivity. How to influence the potential buy-in from the customer by the service provider is basically unpredictable (Scotts 2008). Actions towards this include application of total quality management principles (Mandal 2011) such as involving the customer in strategy formulation, using early adapters to promote improvement, passing some of the cost saving from improvement/s to the customers and by using actual customers in advertising campaigns.

The Unforgiving Product Syndrome is based on the principle that the customer, an equivalent of product in manufacturing, is inclined to rework, and remembers any experience with inspection and rework (Scotts 2008). The problem here is that it is virtually impossible to inspect quality, to prevent all defects in the service processes and to repair the problem without affecting the customer. Coming around this means

employing preventive strategy through documentation of quality problems, assigning responsibilities to employees who ensure appropriate improvements are made to accomplish the preventive objective, reworking with the customers attitude (which is an uncertain specification and sometimes ineffective) by giving a free service or refunding the customers money as well as offering a channel of communication.

1.1.2 Unified Services Theory and Service Quality

Unlike manufacturing, customer inputs are key when value is being created in service business processes (Richard 2009). When this inputs are incomplete, defective or generally non- conforming, the expected output would be questionable yet affects customers perceived service quality. This is explained by the implication of unreliable supplier dilemma and capricious labour through supply of unreliable inputs and labour.

When customers supply unreliable inputs, this affects the service process efficiency, job design as well as customer satisfaction. Capricious labour on the other hand affects quality of service delivered because customers refuse to cooperate with quality and productivity, ignore technology introductions and process improvements (Scotts 2008). This happens because as the service provider tries to deliver quality services by ensuring that the services delivered conform to the set standards, the customer on the other hand obstructs the improvement process by supplying unreliable inputs and labour.

Perceived service quality is important for the service provider. It concerns interactions themselves that change the perception of the customer and affect the service process. A balance therefore has to be struck between retaining the customer and the organization culture and structure. Perceived service quality has the advantage of

increased reliability by the customer, reduces cost, and improves quality and production as well as profitability of the business. It is on this basis that a model can be investigated in the context of hospitality sector in Kenya.

1.1.3 Hospitality Sector in Nairobi Kenya

Hospitality industry includes hotels, restaurants and resorts, cruise lines, airlines and other forms of travel, tourism and special events planning (Meyer 2006). This service industry has two dimensions: one, the high contact standardized services and the low contact standardized services. Our interest is the hotels and restaurants that fall under the high contact standardized service industry (Levitt 1976).

Quality demanded has changed due to increased population within Nairobi city, the blend of international customers, the market tastes and market demands. This is despite the fact that there are many restaurants and hotels within the city. The food service industry therefore needs to step up its efficiency and effectiveness so as to be competitive in the market. Of important to the managers of the industry are the competitive variables namely price, time, quality and flexibility. Price here, a sensitive competitive factor, is normally fixed by marketers but lower bounded by production costs (purchase price, use costs, maintenance costs and disposal costs). Quality will be in terms of timelines of service and customer experience. Time is affected by production lead time and information lead time while flexibility concerns mix and volume. The issue for these companies is to integrate these variables and position themselves appropriately.

1.2 Statement of the Problem

The argument is that perceived service quality will be affected by the quality control methods and the cooperation of the customer in improvements through the quality of

inputs supplied. Inputs affect this output given a constant process and affect the effectiveness of quality control methods. Additionally, they affect the effectiveness of improvement plans.

The hospitality sector is competitive. This is because there are many players in the industry and customer's demands have been changing and increasing over time. This calls for high investment in the quality of services delivered through staff recruitment and training as well as motivation, as this affects cost and skills requirement. The competitive environment also calls for a diversified and integrated approach that earns customer reliability and demand for the services through continuous product improvement and capacity management .This is while minimizing cost as resources are scarce. Striving to achieve this will enhance the survival of the business in the industry. As such, various local and international studies have been done in trying to explain related phenomenon as below:

On a global perspective, Hassan and Fevzi (2005) conducted a study on factors influencing productivity in small island hotels in northern Cyprus. The research concluded that staff recruitment, staff training, meeting guests' expectations and service quality are the main productivity factors in hotels. A related study by Anastasios and Panikkos (2007) focused on specific human resource issues that challenge managerial level employees of the Cypriot hospitality industry. The study established that motivation factors are likely to change as demographics change and that motivation factors tend to echo those which relate to the content motivation theories whose focus is on what it is about an individual.

Bernadette (2008) conducted a study that sought to understand the notions of talent from both an organizational and hospitality graduate perspective. The study

concluded that commitment, professionalism, motivation and graduates development were key in the attainment of long terms objectives in hospitality organizations.

Dennis (2013), in his study, evaluated how you can use quality as a strategy for improved competitive advantage in the hospitality sector. The study found that growth of hotel chains, product improvement, sponsorship programmes and capacity management strategies are factors that put Sarova group of hotels on a competitive edge. Another study by (Susan 2013) focused on employee perception as a factor of service quality. The study revealed that both intrinsic and extrinsic factors are effective in motivating generation Y employees.

Kiguru (2010) also conducted a study on adopting the learning organization concept. The study focused on hotels in the hospitality sector in Nairobi and it established that organizational, functional and personal factors do affect the learning organization concept. Lastly, a study by (Nginyi 2002) investigated challenges companies face in provision of quality customer service .The study established that customer service in five star -rated hotels provided a stepping stone for improved customer satisfaction and maintain loyalty to any hotel brand. As such, none of these studies have attempted to investigate the application and use of unified services theory to model perceived quality in services.

This study investigates service quality based on unified services theory. It seeks to determine how unified services theory can explain the variability in perceived services quality of organizations. It seeks to answer the research question: can unified services theory explain the variations identified in perceived service quality of different firms.

1.3 Research Objectives

The research sought to achieve the following three objectives:

1. To determine how customer inputs affect perceived service quality in hospitality industry in Kenya
2. Determine quality control methods used in improving quality of service delivered
3. Establish if customer supplied inputs moderated by quality control methods affects perceived service quality

1.4 Value of the study

The results of this study would be of value to the managers, operational managers and those working in the hospitality sector. The research findings would provide the decision makers with means to deal with issues around decision making. Issues like variability and how to satisfy customers' needs would help them to make the right decision

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the theoretical literature from significant past studies, both recent and historical, on the subject: unified services theory as an explanatory framework for perceived quality in hospitality sector. The Literature has been reviewed along three themes: customer as supplier to service production, quality control in services, quality improvements, service quality in the hospitality industry, and finally a summary and a conceptual model of the study.

2.2 Customer as supplier to service production

This theme discusses two conceptual papers namely customer supplier duality as it pertains to supply chain management (Scotts 2000) and the rise of caesarean section rates in Nigeria (Okeke and Okezie 2011). The papers bring out the fact that customers are key suppliers of inputs and labour in the service production process.

Scotts (2000) proposition on customer supplier duality and bidirectional supply chain in service management organisations, explored the customer duality as it pertains to supply chain management including practical and managerial implications. He argues that with service organizations unlike manufacturing, one of the primary suppliers of process inputs is customers themselves, who provide their bodies, minds, belongings or information as inputs to the service production process.

The study focused on industries in the United States of America. Two issues are to be considered here. One; the issue of generalisability and two; if this can be applied in the Kenyan context.

Okeke and Okezie (2011) in their conceptual paper investigated why caesarean section rates were on the increase in Nigeria. Secondary data from past case studies formed the basis of the study. They concluded from the findings that despite the low cost of virginally delivery, caesarean was a preference for many. The researcher attributed this to fetal distress. Other suggestions reported included adequate training and exposure to caesarean section but reduced training on operative vaginal delivery, anesthesia and repeat caesarean section being the major reason. They however noted that Nigerians were averse to caesarian section for reasons that include the feeling of a sense of reproductive failure, social misfit (not woman enough), for financial implications, poverty, ignorance, illiteracy, access difficulties and culture.

However, having conducted their studies in Nigerian hospitals, it cannot be presumed that this would apply to other countries like Kenya due to the difference in the social cultural background.

2.3 Quality control in services

These themes focus on inspection, prevention and reporting as the key quality control tools in services. Inspection is used in the context of customer perception of internet retail service quality (Swinder 2002) and e-service quality and its importance to customer satisfaction (camel 2009). Prevention focuses in evaluating the extent to which the adoption of organisation quality improvement strategies influence the delivery and outreach of diabetes self management education services provided by local health departments. Lastly, is a conceptual paper on patients' satisfaction that adopted reporting as a service quality tool in explaining quality improvements (Rashid 2014).

Swinder et al (2002) research sought to know how customers demand for internet retail service can be improved in buying of goods and services. This is because customers were still purchasing at brick-and –mortar retailers with the presence of the internet. The study adopted a qualitative approach where semi-structured in-depth interviews were used to collect data among 58 respondents in United States of America. They found out that customers were reluctant to use internet retail services because they did not understand the elements of e-retailing services such as performance, access, security, sensation and information

Similarly, a study seeking to know how performance, access, security, sensation and information affects internet retail banking in Kenya and in the hospitality sector would be of value.

A similar statistical survey was conducted by Camel and Scotts (2009) who sought to determine the importance of e-retailing in enhancing customer satisfaction within the banking sector. The survey study in Australia found that personal need, site organization, user friendliness and efficiency were predictors of overall customer satisfaction. The study still left unexplained how that satisfaction is brought about and if the same results would be achieved in the Kenyan context.

A study by Angela, Dearinger, Ingram, Pendley and Sarah (2013) focused on activities of quality control. The conceptual paper suggests that quality improvement teams and onsite quality improvement training are some of the activities. The focus is on prevention of quality problems rather than actions after. A conclusion from Angela et al suggests prevention as the key means of assuring quality in services. How well this would work in the Kenyan situation would be an area of study.

A study by Rashid and Amina (2014) uses patient reporting as a quality improvement activity. This study is in no way contradictory to Angela et al in that the reporting is to be used for improvement rather than just for intervention on specific quality issues.

A similar study done in Kenyan context on how reporting would be used in the hospitality sector would be of importance.

2.4 Quality Improvements

This theme explores two research papers: one on effectiveness of quality improvement initiatives in service operation context (Mahmoud and Jafar 2007) while Arif (2010) links quality assurance to human resource management. The studies revealed that quality assurance and improvement are important aspects of quality service**.**

Mahmoud (2007) in his paper sought to study the environmental and competitive factor in the service organisations and to investigate the extent of effective implementation of quality improvement initiatives, in different operational settings in the United States of America. Service analysis was used to determine the underlying factors associated with the changes in the competitive environment. Promotional measures were used to study the implementation of quality improvement initiatives. The research found that quality improvement initiatives are not implemented uniformly by all service industries as they face varying degree of effectiveness.

Since the study was conducted in the United States of America, the same would need to be evaluated in the Kenyan context.

A study by Arif (2010) linked quality assurance to human resource management. The study focused on small micro enterprises (SMEs) in Malasia. It compared selected

ISO certified small micro enterprises with non-International Standards Organisation (ISO) certified small micro enterprises on several human resource practices. The results of the study indicated a moderate rating of most of the human resource systems in all organisations including those without International Standards organization (ISO) certification. However, ISO certified companies were perceived to be doing better on practices like career systems, conducting contextual analysis for goal setting and quality orientation.

Since the study was conducted in Malaysia, a similar study in the Kenyan context would be of value.

2.5 Service quality and the hospitality sector

This theme focuses on a conceptual paper and two research papers. The conceptual paper focuses on the role of emotions in determining customer satisfaction and behavioral intentions (O'neill et al 2008). Aamna et al (2010) research paper sought to find the determinants of customer satisfaction, while R. Ladhari (2009) in his research paper wanted to find out the relationship between service quality, emotional satisfaction and behavioral intentions.

O'neill et al (2008) in their paper, aimed at building a body of literature that recognizes the role of emotions in determining customer satisfaction and behavioral intentions. This was a longitudinal survey conducted at a league football stadium in United States of America where 407 'off-pitch' match attendees were evaluated on service quality in the context of emotions aroused by 'on-pitch' activities. A time elapsed three-stage survey was used to evaluate the respondent and any changes over time. They found out that emotionally based satisfaction was a better predictor of future behavioral intentions than cognitive measures of satisfaction. They concluded

that there is need to use both emotional and cognitive measures of satisfaction when evaluating customer satisfaction and future behavioral intentions.

In the study customer satisfaction focused on issues such as cleanliness of the stadium, ease to access the stadium, catering facilities, efficiency and effectiveness of service providers among others. Such factors would need to be evaluated in the context of a Kenyan league stadium.

O'neill et al (2008) concurs with Aamna et al (2010) research findings on determinants of customer satisfaction within the hotels in Pakistan. This was a quantitative study where the hotels operating within the twin cities of Pakistan were treated as population of study. 25 customers were interviewed as respondents from each selected hotel. These were self administered questionnaires and data was analyzed. The data analysis revealed that improved and superior service quality and service features augment customer satisfaction and the future intention to satisfy customers would be magnified.

Since the study was conducted in Pakistan. This study will seek to find out if the same is true in the case of hotels in Kenya.

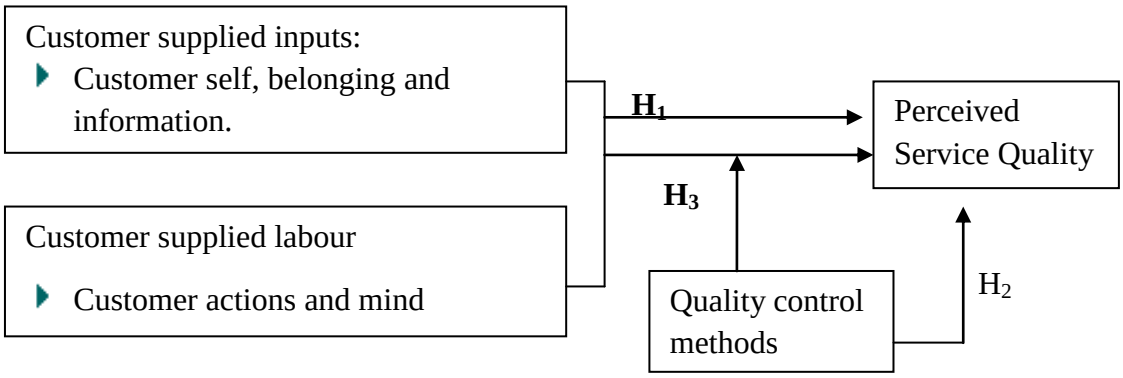
R. Ladhari (2009) in his research paper wanted to find out the relationship between service quality, emotional satisfaction and behavioral intentions. His study utilized a review of the literature to propose a conceptual model that was tested in an empirical study with data from a survey among 200 Canadian travelers. He found out that service quality exerts both direct and indirect effects through emotional satisfaction and behavioral intentions. He therefore concluded that emotional satisfaction makes a significant contribution to the prediction of behavior intentions such as loyalty, word of mouth and willingness to pay more.

Since the conceptual model was tested using data from Canadian travelers, a similar test with data from Kenya hospitality sector to test this hypothesis would be of value.

2.6 Summary and conceptual framework of the study.

Presented in figure 2.1 below is a model derived from the literature. In this model perceived service quality is a function of the inputs from the customer and quality control methods over and above what the firms does.

Figure 2.1: The Conceptual Model of the Study



Source: Author (2014)

The model is examined by testing the following hypotheses:

$H_{1;}$ The nature of customer supplied inputs does not influence the quality of service output as perceived by the customer.

$H_{2;}$ The quality control method adopted does not influence the quality of service delivered.

$H_{3;}$The nature of customer supplied inputs moderated by the quality control method does not influence perceived service quality.

Table 2.1 summary of Literature Review

Table 2.1 presents the reviewed papers, the findings, the gaps and the action to be taken in the proposed study. The papers reviewed are summarized in terms of the variables they have focused on. This is as shown below.

Table 2.1: Summary of Literature Review

Study and type	**Findings**	**Gap**	**Issue to be examined in the proposed study**
Scotts (2000) A conceptual paper	The primary supplier of service process inputs is the customers themselves	How this would work in practice	Examination of practices using data from a context
Okeke (2011) A conceptual paper	Inputs can be ignored or manipulated	Geographical context	Examination of practices using data from a context
O'neill (2008) A conceptual paper	Emotional and cognitive measures influence customer perception	Geographical context	Empirical research in the context of Kenya
R. Ladhari (2009) A research paper	Emotional satisfaction influences future behavior of a customer	Geographical context	Empirical research in the context of Kenya
Aamna et al (2002) A research paper	Improved and superior services influence customer behavior	Geographical context	Empirical research in the context of Kenya
Swinder et al (2002) A research paper	Inspection as a tool has the ability to influence future demand	Geographical context	Empirical research in the context of Kenya

Camel and Scott(2009) A research paper	Inspection is an important tool in quality control	Geographical context	Empirical research in the context of Kenya
Angela et al (2013) A conceptual paper	User facilitator model is important in quality control	Geographical context	Examination of practices using data from a context
Rashid and Amina (2014) A conceptual paper	Reporting is an important quality outcome indicator in measuring the success of a service delivery system	Geographical context	Examination of practices using data from a context
Mahmoud and Jafar (2007) Research paper	Quality improvement initiatives influence service quality	Geographical context	Empirical research in the context of Kenya
Arif (2010) A research paper	Quality assurance as a factor affects service quality	Geographical context	Empirical research in the context of Kenya

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methodology that was used in gathering and analyzing data and reporting the results of the stated objectives in chapter one of this study. It sets out the research design, the study population, sample design, data collection and analysis.

3.2 Research design

This was a formalized cross-sectional research design. The study was descriptive and focused on hospitality sector. The unit of analysis was individual hotels and restaurants. According to Cooper and Emory (1995), a descriptive study is used when the what, who, where or how of a phenomenon is the focus of the proposed study. This type of study aids in fact finding and can be used to formulate principles of knowledge and solutions to problems. Descriptive studies present data in a meaningful form thus helping to understand the characteristics of a given group in a given situation (Kerlinger 1999).

3.3 Population

The target population included hotels and restaurants within Nairobi County. Nairobi is estimated to have about 400 hotels and restaurants (www.tripadvisor.co.uk/restaurants-g294207-nairobi.html). Choice provided convenience and the metropolitan nature of Nairobi is such that cultural issues would not influence outcome. The study focused on formal hotels and restaurants with a seating capacity of (80-300) for restaurants without accommodation, and (270-3000) for hotels with accommodation. Due to their formal nature, language was not to be a

problem. The elements were put into a list drawn from the internet for the purpose of sampling (www.tripadvisor.co.uk/restaurants-g294207-nairobi.html).

3.4 Sample design

A sample of 40 was drawn out of the sampling frame developed from internet sources. The method was systematic sampling design. This would be achieved by having all the elements put into a list and then every K^{th} element in the list systematically chosen for inclusion in the sample. This size of the sample formed 10% of the qualifying population.

According to (Mugenda and Mugenda 2003) a representative sample which is at least 10% of the population, if well chosen, gives good reliability hence, the choice of 10% is considered representative. The respondents of the study would be managers, operational managers and additionally one other staff. This additional respondent would be picked using convenient sampling.

3.5 Data collection and sampling design

The study focused on managers, operational managers and one other additional staff. The questions to ask were based on indicators used in (Scotts 2000; Okeke and Okezie 2011) customer supplied inputs, quality improvement(Mahmoud and Jafar 2007; Arif 2010), the hospitality sector (O'neill et al 2008; Aamna et al 2010), while indicators of quality control in services were as Swinder (2002), and Camel (2009).

The questions in the study sought to find if customer input in the service supply process is extensive or limited, if customer involvement of labour is full or limited, if the quality control method is preventive or reactive and finally, if the outcome of

perceived service process led to a repeat visit, causes a feedback or leads to capacity utilization.

3.6 Data analysis

Data was a mix of binary and Likert scales (William 2008). Descriptive statistics were to be computed. This would be the mean, the standard deviation, the correlation coefficient and the coefficients of determination, of the variables indicators, obtained objectively. The results were used to interpret the predicted equation.

Table 3.1 A summary of the computed mean, standard deviation and correlation coefficients

Variable	Mean	Standard deviation	Correlation coefficient
Customer role			
Customer input autonomy			
Quality of customer inputs			
Extent of customer inputs			
The quality control method used			
Perceived service quality			

Source: Author 2014

The correlation coefficients were used to test the null hypothesis. The null hypotheses were that the coefficient of correlation between perceived quality and each of the variables is not significantly different from zero. The level of significance of the correlation coefficient was examined at 95% percent level of confidence.

In the case of H_1 in the conceptual model, failure to reject the null hypothesis will indicate that customer supplied inputs have insignificant influence on perceived service quality. In the case of H_2 failure to reject the null hypothesis would indicate

that the quality control methods have insignificant influence on perceived service quality and lastly, in the case of H_3, failure to reject the null hypothesis would indicate that customer supplied inputs moderated by the quality control methods have insignificant influence on perceived service quality.

Results of the study were also achieved through regression analysis. This helped determine the beta coefficients, the p-value and coefficient of determination (R^2). This is as shown in the equation below:

$$Y=ß_0 + ß_1x_1 + ß_2x_2 + ß_3x_3 + ß_4x_4 + ß_5x_5 + e$$

Prediction equations;

$$Y=ß_0 + ß_1x_1 + ß_2x_2 + ß_3x_3 + ß_4x_4 \quad \text{(i)}$$

$$Y=ß_0 + ß_5x_5 \quad \text{(ii)}$$

$$Y=ß0 + ß_p(X_2\ X_4)*(ß_5\ X_5) \quad \text{(iii)}$$

Where: Y refers to perceived service quality

$ß_0$ is a constant, the intercept between x and y axis

$ß_{1.....\ ß5}$ are the correlation coefficients

x_1-Customer role

x_2 –Customer input autonomy

x_3 – Quality of customer inputs

x_4 –Extent of customer inputs

x_5 –Quality control approach

e- Is the error term

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents research findings of the study which have been discussed under thematic sub-sections in line with the study objectives. The thematic areas included; Questionnaire return rate, descriptive analysis technique was utilized which involved use of descriptive statistics and tabulations. Descriptive statistics used included frequencies and percentages. The tabulations were basically pie charts, bar graphs and the associated proportions utilized in generating the graphs. In addition the two sample t-tests were also conducted and finally a regression model was specified and estimated.

4.1.1 Results

One hundred and sixteen (116) responses were received out of the expected one hundred and twenty (120). Out of the 116 returned questionnaires, 12 of them were defective either because they did not refer to any organisation or there was only one response from the organisation hence was considered insufficient for analysis. Ultimately, valid and usable questionnaires were one hundred and four (104) achieving a response rate of 90%. According to Mugenda and Mugenda (1999), a response rate of 50% is adequate for analysis and reporting while response rate of 60% is good and a response rate above 70% is excellent. The distribution of this data focused on hotels with accommodation and restaurants without accommodation. This is as shown in table 4.1 below:

Table 4.1 Analysis of returned questionnaires

Type of establishment	No. of questionnaires administered	Number received back	Usable questionnaires	Response rate of usable question-nnaires in %
Hotels with accommodation	17	17	16	94
Restaurants without accommodation	103	99	88	78
Total	120	116	104	90

Source: Survey data

Table 4.1 above shows that of the total number of questionnaires received back were more usable in the hotels with accommodation with a response rate of 94% compared to restaurants with accommodation with 78% response rate. This can be explained by the fact that a larger sample size was administered to the restaurants without accommodation and therefore a higher non response rate was expected. Overall, an average response rate of 90% was achieved.

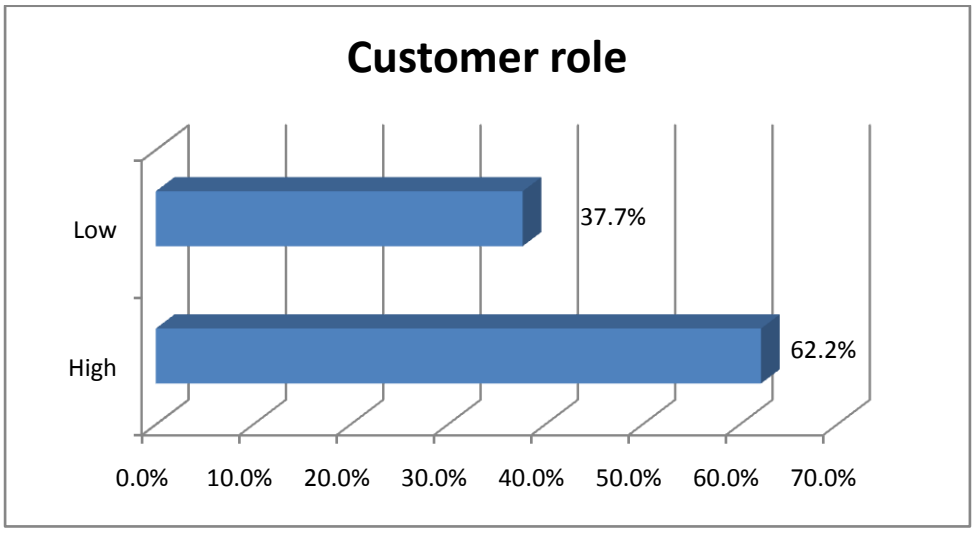
The data collected was then re-organized by variables and source organizations identified only by references. Some variables presumed discrete values and had to be categorized namely customer role, customer input autonomy and quality control method. An aggregate mean for the measurement questions relating to the variable of customer role was computed. Transformed by their means and allowing for 5% accuracy, the mean significantly above 3.0 in a scale of 1-5 was categorized as “high” and where the aggregate mean was not significantly above the median value of 3.0,was categorized as” low”. High was then given a binary value of “1” and low “0”

(Refer to appendix B). Further, an aggregate mean for the measurement questions relating to the variable of quality control method was computed. The mean significantly above 3.0 in a scale of 1-5 was categorized as "preventive" and where the aggregate mean was not significantly above the median value of 3.0,was categorized as" reactive"(Refer to appendix A). Preventive was then given a binary value of "1" and reactive "0"The single construct item for variable of customer input autonomy was similarly categorized based on the accuracy level on the value above the median value. Where the value was significantly greater than 3.0, the autonomy was "high" otherwise "low". High was then given a binary value of "1" and low "0"

Variables that were continuous in nature namely quality of customer input, extent of customer input and perceived service quality were also aggregated to means and standard deviation (SE) for every organisation(Refer to appendix C). Results of categorized variables are presented as shown in appendix A.

In terms of the variable of customer role, the distribution is shown below:

Figure 4.1 Customer role

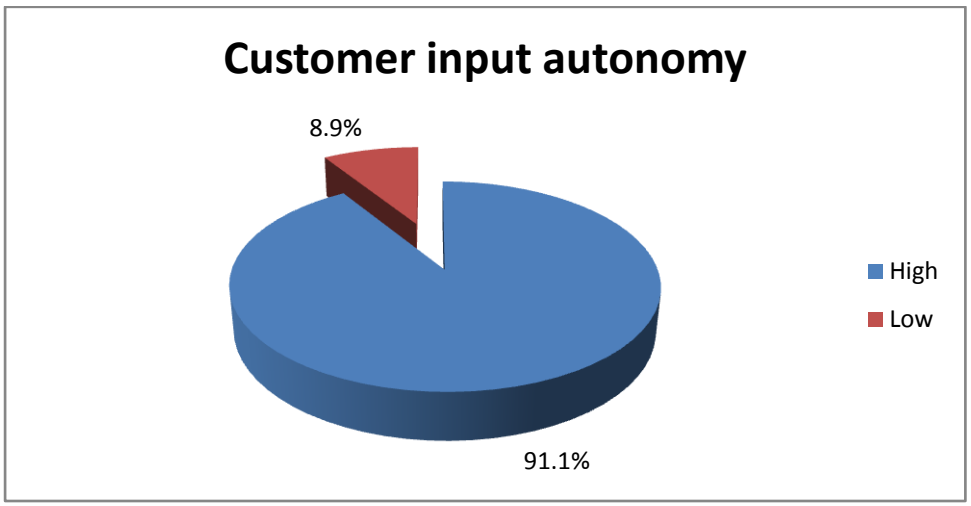


Source: Survey data

Figure 4.1 shows that customer's role was high across many organizations with a response rate of 62.2% while customer role was low with a response rate of 37.7%.

Similarly, on the variable of customer input autonomy, the distribution is as per figure 4.2 below

Figure 4.2 Customer Input Autonomy

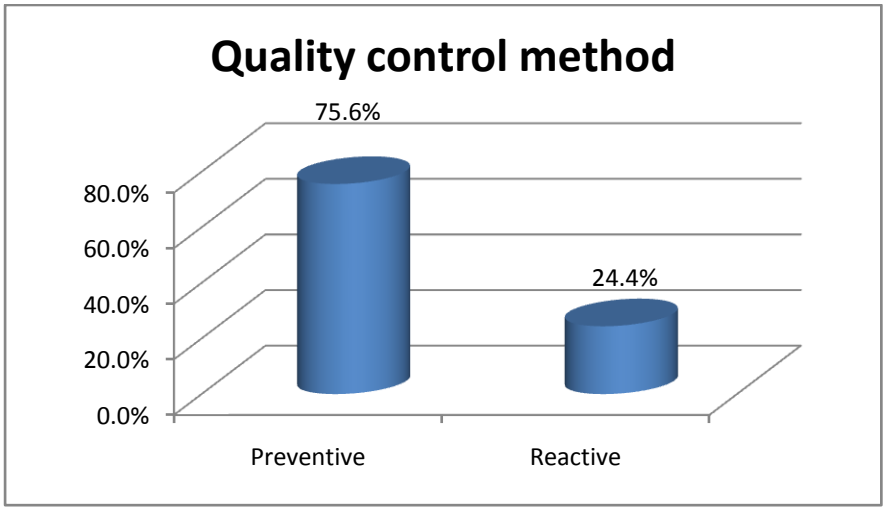


Source: Survey data

Figure 4.2 shows that customer input autonomy was high across many organizations with a response rate of 91.1%. Only 8.9% of the organizations experienced low customer input autonomy.

In terms of quality control method, 75.6% of the organizations adopted a preventive approach while 24.4% of the organizations adopted a reactive approach as shown in figure 4.3 below:

Figure 4.3 Quality Control methods



Source: Survey data

A Pearson's correlation matrix is tabulated in table 4.2 which presents the correlation between the variables. In addition every bivariate association of the variables which are statistically significant are starred.

Table 4.2 Variables correlation matrix

VARIABLES CORRELATION MATRIX						
	Customer role	Customer input autonomy	Quality of customer input	Extent of customer input	Quality control method	perceived quality
Customer role	1	0.240	0.090	0.445*	0.407*	0.445*
Customer input autonomy	0.240	1	0.304796	0.256464	0.185738	0.137828
Quality of customer input	0.090	0.304796	1	0.543741	0.158879	0.318231
Extent of customer input	0.445*	0.256464	0.543741	1	0.204516	0.007801
Quality control method	0.407*	0.185738	0.158879	0.204516	1	0.078461
Perceived quality	0.445*	0.137828	0.318231	0.007801	0.078461	1

Source: Survey data ***Correlation is significant at the 0.01 level (one tail test)**

The computed correlation coefficients of the categorized and continuous study variables indicate that no two variables are highly correlated hence they can be analyzed independently of each other.

Table 4.3 Quality of customer inputs and extent of customer inputs correlation matrix

	Quality of customer inputs	Extent of customer inputs	Perceived service quality
Quality of customer inputs	1	0.543741	0.318231
Extent of customer inputs	0.543741	1	0.007801
Perceived service quality	0.318231	0.007801	1

Source: Survey data

Table 4.3 above indicates that quality of customer inputs and extent of customer inputs are positively correlated with a correlation coefficients of 0.543741.

Table 4.4 Quality of customer inputs and extent of customer input autonomy correlation matrix

	Quality of customer inputs	Customer input autonomy	Perceived service quality
Quality of customer inputs	1	0.304796	0.318231
Customer inputs autonomy	0.304796	1	0.137828
Perceived service quality	0.318231	0.137828	1

Source: Survey data

Results of the correlation matrix indicate that there is a positive relationship between quality of customer inputs and customer input autonomy with correlation coefficients of 0.304796.

Table 4.5 Quality of customer inputs and quality control method correlation matrix

	Quality of customer inputs	Quality control method	Perceived service quality
Quality of customer inputs	1	0.158879	0.318231
Quality control method	0.158879	1	0.078461
Perceived service quality	0.318231	0.078461	1

Source: Survey data

Table 4.5 shows that quality of customer inputs and quality control method adopted are positively correlated with a correlation coefficient of 0.158879.

Table 4.6 Quality control method and extent of customer inputs correlation matrix

	Quality control method	Extent of customer inputs	Perceived service quality
Quality control method	1	0.204516	0.078461
Extent of customer inputs	0.204516	1	0.007801
Perceived service quality	0.078461	0.007801	1

Source: Survey data

Table 4.6 shows that there is a positive relationship between quality control method and extent of customer inputs with a correlation coefficient of 0.204516.

CHAPTER FIVE: FINDINGS, DISCUSSIONS AND CONCLUSION

5.1 Introduction

This chapter presents statistical tests of results presented in chapter 4 so as to determine statistical significance. Hypotheses are tested, conclusions are drawn, recommendations given and further areas for possible research provided.

5.2 (i) Customer supplied inputs and perceived service quality.

The null hypothesis set out in relation to this objective was that the nature of customer supplied inputs does not influence output as perceived by the customer. Here, customer supplied inputs was an output of customer input autonomy and extent of customer inputs. Using organisation means and standard deviation the hypothesis was tested using a t-test and the findings are as in the table 5.1

Table 5.1 Customer supplied inputs and perceived service quality in the hospitality industry in Kenya

	Aggregate mean	Aggregate Std. dev	No of cases	Confidence interval	df	Observed t-value	Critical t-value
High	3.55	0.5	45	95%	6	28.85	1.9432
Low	1.3	0.24	45	95%	6		

Source: Survey data

Table 5.1 shows that since the observed t=28.85 is greater than the critical value t=1.9432, the null hypothesis is rejected and therefore there is a significant relationship between customer supplied inputs and perceived service quality in the hospitality sector in Kenya.

(ii) Quality control method and perceived service quality.

The study further explored the relationship between quality control method adopted and perceived service quality within the hospitality sector in Kenya. Organisation means and standard deviation were used to test the null hypothesis using a t-test and the findings are as in table 5.2 below

Table 5.2 Quality control method adopted and quality of service delivered in the hospitality industry in Kenya

	Mean	Std. dev	No of cases	Sig level (one tail test)	df	Observed t-value	Critical t-value
Preventive	3.44	0.195	45	95%	6	2.7	1.9432
Reactive	2.9	0.18	45	95%	6		

Source: Survey data

Table 5.2 shows that since the observed t=2.7 is greater than the critical value t=1.9432, the null hypothesis is rejected and therefore there is a significant relationship between quality control method adopted and perceived service quality in the hospitality sector in Kenya.

5.3 The proposed study model, dependent and independent variables were then subjected to regression analysis to determine the coefficients as shown in table 5.3 below:

Table 5.3 Regression of perceived service quality

Variable	Beta	R-square	p-value
Constant	-0.12	-	-
Customer role	0.045339	0.004449	0.663318
Customer input autonomy	0.10462	0.049021	0.143833
Quality of customer inputs	0.20195	0.101273	0.033136
Extent of customer inputs	0.004243	6.11e-05	0.959368
Quality control method	0.266825	0.058159	0.110514

Source: Survey data **Dependent variable: Perceived service quality**

Independent variables: Customer role, Customer input autonomy, Quality of customer inputs, Extent of customer inputs and Quality control methods.

Hence, from the standardized and the un-standardized values, the multiple regression equation becomes:

$Y=-0.12+ 0.045339X_1+0.10462X_2 +0.249352X_3 +0.004243X_4 +0.266825X_5 +e$

where

Y= Perceived service quality

$ß_0$ $ß_1$, $ß_2$, $ß_3$, $ß_4$, ß5 are the beta coefficients

X_1 = Customer role

X_2 =Customer input autonomy

X_3 =Quality of customer inputs

X_4 =Extent of customer inputs

X_5 =Quality control method adopted

E = Error term

The constant ß= -0.12 indicates that perceived service quality will lead to dissatisfaction by 0.12 when the first customer comes to the organisation. The results also indicate that though not significant in explaining the model, customer role explained the variability of the dependent variable by 0.4%, customer input autonomy by 4.9%and quality control method by 5.8%. Further the results indicate that the quality of customer inputs ($ß_3$=0.209548 $p<0.05$) was statistically significant in explaining perceived service quality in the hospitality sector. This is because a reported p-value ($p< 0.05$) was construed to mean that the overall model was significant.

Further, $ß_1$ coefficient indicate that for every one unit change in customer role, perceived service quality changes by 4.5%, for every one unit change in customer input autonomy, perceived service quality changes by 10.5%, for every unit change in quality of customer inputs, perceived service quality changes by 20.2% and for every unit change in quality control method, perceived service quality changes by 26.7%.

5.3 (i) Customer supplied inputs moderated by quality control method does not influence perceived service quality in the hospitality sector.

To test the null hypothesis if perceived service quality has been influenced by customer supplied inputs moderated by quality control method adopted, organisation means of perceived service quality were regressed against a product of customer supplied inputs and quality control method. Results are as shown in table 5.4

Table 5.4 Regression of perceived service quality

Variable	Beta	R-square	p-value
Quality control methods*customer supplied inputs (Customer input autonomy* Extent of customer inputs	0.004186	0.024207	0.307459

Source: Survey data **Dependent variable: Perceived service quality.**

Independent variables: Quality control methods*customer supplied inputs (Customer input autonomy* Extent of customer inputs

The results in table 5.4 indicate that since the regression p-value of 0.307459 is greater than α=0.05 at 95% confidence interval, the null hypothesis is not rejected implying that there is no significant relationship between quality control method adopted and customer supplied inputs.

5.4 Discussion

Results from this study establish that the output of a service process depends on customer supplied inputs in terms of the extent of supplied inputs and its autonomy.

This concurs with the findings of Okeke and Okezie (2011) that customers are key suppliers of inputs and labour in the service production process. Scotts (2000) arguments also support this finding that the duality dilemma of customers being primary suppliers of process inputs makes the service process complex.

The study also established that the outcome of a service process depends on the quality control method adopted. The study revealed that preventive quality control method was common in 75.6% of the organizations. This concurs with the findings of Rashid and Amina (2014) that quality control is an important quality improvement activity. This is also supported by the findings of Angela et. al (2013) that quality improvement activities should focus on prevention of quality problems rather than action after.

Similarly, the study established that no relationship exists between customer supplied inputs and quality control method adopted. This is supported by the arguments of Swinder (2002) that inspection as a quality control tool does not always lead to improved service quality. Camel and Scotts (2009) also concur to this argument that inspection as a quality control tool is only a predictor of overall customer satisfaction.

5.5 Conclusion

From the study findings, it can be concluded that customer supplied inputs and quality control method adopted impacts on perceived service quality within the hospitality sector in Nairobi County-Kenya. It can also be concluded that quality of customer inputs are key in influencing perceived service quality. For quality control, a

preventive approach to quality of problems is a better way of assurance of quality in service.

5.5 Recommendations

Based on the conclusions drawn from the study, there is a need for the hospitality industry in Kenya to invest more on how to improve customer supplied inputs in their daily operation. Achieving this calls for being timely in offering of services, meeting customers' expectations and being swift in capturing customers feedback so as to know the areas to improve on.

Additionally, organizations must be seen to adopt quality control measures that are more reactive than preventive, adopt performance measures that are more effective such as assurance of quality, fulfilling customers promises and doing things exactly as asked by the customer as well as managing their seating capacity at all times. They must also be seen to facilitate customer input supply process so that the customer can specify well what they want, act well and present themselves the way the organisation expects it for quality improvement. This concurs with the findings of Grawe et el. (2012) that it is crucial to place emphasis on recognizing customers interest and actively managing relationships with customers in order to improve overall operational performance of an organisation. Lastly, the hospitality sector in Kenya should focus on factors and corrective measures that can improve performance so as to remain competitive.

A recommendation for further study is that this research confined itself to perceived service sector in the hospitality sector in Nairobi County. As such, further studies on

unified services theory and perceived service quality can be done to cover other industries in Kenya and globally.

Also, a replication of this study should be done after sometimes to find out if there are any changes that might have taken place as a result of time difference and then comparison to be made with current data, so that viable recommendations can be drawn.

5.6 Limitations of the study

One limitation in the study was that some respondents were not available for interview ultimately limiting the number of usable questionnaires. Also, some respondents were not objective on the situation facing the sector presumably due to the fear that the information could be used for competitive advantage, confidentiality policies and personal repercussions. Finally, there may be other business and environmental factors that influence perceived service quality in this sector not brought out in this study.

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THE QUESTIONNAIRE

UNIFIED SERVICES THEORY AS A FRAMEWORK FOR PERCEIVED SERVICE QUALITY IN THE HOSPITALITY SECTOR

Thank you for participating in this interview. This research is being conducted for academic purpose only. The data or information given will be treated with utmost confidentiality and the results will be analyzed and reported in summary. You will not be required to give your name or any form of personal identification.

RESPONDENT'S DEMOGRAPHIC FACTORS:

Ref. No……..... Respondents title…….Manager/Not manager [please tick]

Please tick as appropriate on what your own feeling is concerning the stated issues:

1. How important is the interaction with the customer to the quality of service provided by your business?

☐ **Not at all important** ☐ **somewhat Important** ☐ **Don't know** ☐ **Somewhat Important** ☐ **Very important**

2. From the choices below, please indicate what is closest to what the customer brings into the operations that create services

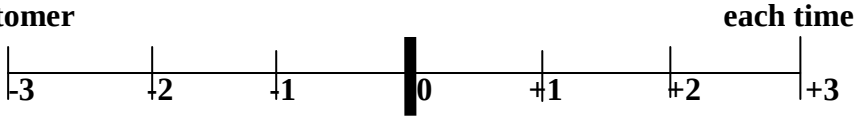
☐ **Customer Property** ☐ **Information** ☐ **Don't know** ☐ **Actions** ☐ **Self**

3. To what extent are you able to influence what the customer brings in?

☐ **Not at All** ☐ **To limited extent** ☐ **Don't know** ☐ **To some extent** ☐ **To a great extent**

4. Please choose a point that represents how far your opinion is from one side:

In our business, we know what to do for the customer — **In our business, customers must specify requirements each time**

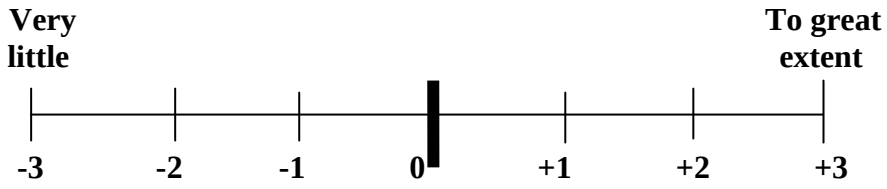


5. Please indicate to what extent each of the following statement is true:

	Extremely Not true	**Somewhat not true**	**Don't know**	**Somewhat true**	**Extremely true**
In our business, the customers always specify well what they want done					
In our business, the customer is the one who knows what they want					
In our business, customers' make sure they provide themselves the way we need it for quality					
In our business, the customers always act well					
In our business, useful benefits come from customers actions and our actions					

6. Please choose a point that represents how far your opinion is from one side:

The customer's activities add value to your work?



Please tick as appropriate on what your own feeling is concerning the stated issues:

8. In our business, we prepare to remedy the situation if the customer is not satisfied?

☐ **Extremely disagree** ☐ **Somewhat disagree** ☐ **Don't know** ☐ **Somewhat agree** ☐ **Extremely agree**

9. In our business, we must get it right the first time?

☐ **Extremely Impossible** ☐ **somewhat Impossible** ☐ **Don't know** ☐ **Somewhat possible** ☐ **extremely possible**

10. In our business, if the customer should complain of service, we?

☐ **Find it normal** ☐ **Find it unusual** ☐ **we would be happy because we know** ☐ **we sometimes trace the cause** ☐ **we always trace the cause and remove it**

11. Please indicate your perception of your business performance in relation to others in similar business as regards the following:

	Much worse than others	**Somewhat worse than others**	**The same as others**	**Somewhat better than others**	**Extremely better than others**
Meeting expectations					
Timeliness					
Doing things exactly as asked to do					
Doing things which we have promised to do					
Assurance of the quality					
Customers repeat visits					
Customers feedback on service delivered					
The capacity we use due to customer demand					

Appendix A: Organizations Aggregate means and Standard Deviation of the predictor variables.

Unit	Custom-er role	Customer input autonomy	Quality control approach	Quality of customer input		Extent of customer input		Perceived service quality	
				mean	Std dev	mea n	Std. dev	mean	Std. dev
org1	Low	High	Reactive	3.8	0	1.33	0	4.29	0
org2	High	High	Preventive	3.9	0	2.5	0	4	0
org3	High	High	Preventive	5	0	2.5	0	4.94	0
org4	High	High	Preventive	4.8	0.71	3	0.71	4.56	0.71
org5	Low	High	Preventive	4.3	0.71	3	0.71	4.06	0.71
org6	Low	Low	Reactive	3.6	0	1.67	0	4.13	0
org7	Low	High	Preventive	3.27	0	0.33	0	4.42	0
org8	High	High	Preventive	4.2	0	2.5	0	3.94	0
org9	High	High	Reactive	4.5	0.71	2	0.71	4.19	0.71
org10	High	High	Preventive	3.9	0	2.5	0	4.19	0
org11	High	Low	Preventive	4.5	1.41	2.5	1.41	3.88	1.41
org12	High	High	Preventive	4.3	0	2.5	0	4.38	0
org13	High	High	Preventive	4.1	0.71	2.5	0.71	3.81	0.71
org14	Low	High	Reactive	4.33	0.58	2.33	0.58	3.75	0.58
org15	High	High	Reactive	4	0.71	2.5	0.71	4.25	0.71
org16	High	High	Preventive	4	0.71	2.5	0.71	3.44	0.71
org17	Low	Low	Reactive	2.2	1.16	1.33	1.16	4.13	1.16
org18	Low	High	Preventive	4.5	0.59	3	0.58	4.54	0.58
org19	High	High	Preventive	4.2	0	3	0	4.25	0
org20	Low	High	Preventive	3.2	0.58	2.67	0.58	3.67	0.58
org21	High	High	Preventive	4.2	0	3	0	4.5	0

org22	Low	Low	Preventive	4.4	2.83	2.5	2.83	4.25	2.83
org23	High	High	Preventive	4.6	0	3	0	4.63	0
org24	High	High	Preventive	4.47	0.58	3	0.58	4.38	0.58
org25	High	High	Preventive	4.5	0.71	2.5	0.71	4.13	0.71
org26	High	High	Preventive	4.6	0	3	0	4.06	0
org27	High	High	Preventive	3.4	0	2.5	0	3.94	0
org28	High	High	Preventive	4.67	0.58	3	0.58	4.29	0.58
org29	Low	High	Preventive	3.6	0.71	3	0.71	3.94	0.71
org30	Low	High	Preventive	4.3	0	3	0	4.25	0
org31	High	High	Preventive	4.22	2.12	3	2.121	4.06	2.121
org32	High	High	Preventive	4.2	0	3	0	4.75	0
org33	Low	High	Preventive	4.07	0.58	2	0.58	4.33	0.58
org34	High	High	Preventive	3.8	0.71	1.5	0.71	3.94	0.71
org35	High	High	Reactive	4.33	1.53	2.33	1.53	4.5	1.53
org36	High	High	Reactive	4.7	0	2.5	0	3.94	0
org37	Low	High	Reactive	3.9	0	3	0	4.38	0
org38	Low	High	Preventive	4.2	0	1.5	0	4.81	0
org39	Low	High	Preventive	3.8	0.58	2	0.58	4.13	0.58
org40	High	High	Preventive	4.6	0.71	3	0.71	3.94	0.71
org41	High	High	Reactive	4.2	0.71	3	0.71	4.19	0.71
org42	High	High	Reactive	4.6	0.71	3	0.71	4.38	0.71
org43	Low	High	Preventive	4.1	0	2	0	4.56	0
org44	Low	High	Preventive	4.27	0	2.33	0	4.75	0
org45	High	High	Preventive	4.5	0	3	0	4.81	0

Source: Survey data

Appendix B: DATA OF CATEGORIZED VARIABLES IN BINARY FORM

Establishment Ref.	Category of service	Customer input autonomy	Quality control method	Quality of customer input	Extent of customer input	Performance for perceived quality
	X1	X2	X5	X3	X4	X6
org1 mean	o	1	0	3.8	1.3333	4.2917
org2 mean	1	1	1	3.9	2.5	4
org3 mean	1	1	1	5	2.5	4.9375
org4 mean	1	1	1	4.8	3	4.5625
org5 mean	o	1	1	4.3	3	4.0625
org6 mean	o	0	0	3.6	1.6667	4.125
org7 mean	o	1	1	3.2667	0.33333	4.4167
org8 mean	1	1	1	4.2	2.5	3.9375
org9 mean	1	1	0	4.5	2	4.1875
org10 mean	1	1	1	3.9	2.5	4.1875
org11 mean	1	0	1	4.5	2.5	3.875
org12 mean	1	1	1	4.3	2.5	4.375
org13 mean	1	1	1	4.1	2.5	3.8125
org14 mean	o	1	0	4.3333	2.3333	3.75
org15 mean	1	1	0	4	2.5	4.25
org16 mean	1	1	1	4	2.5	3.4375
org17 mean	o	0	0	2.2	1.3333	4.125
org18 mean	o	1	1	4.5	3	4.541667
org19 mean	1	1	1	4.2	3	4.25
org20 mean	o	1	1	3.2	2.6667	3.6667
org21 mean	1	1	1	4.2	3	4.5

org22 mean	o	0	1	4.4	2.5	4.25
org23 mean	1	1	1	4.6	3	4.625
org24 mean	1	1	1	4.4667	3	4.375
org25 mean	1	1	1	4.5	2.5	4.125
org26 mean	1	1	1	4.6	3	4.0625
org27 mean	1	1	1	3.4	2.5	3.9375
org28 mean	1	1	1	4.6667	3	4.291667
org29 mean	o	1	1	3.6	3	3.9375
org30 mean	o	1	1	4.3	3	4.25
org31 mean	1	1	1	4.22	3	4.0625
org32 mean	1	1	1	4.2	3	4.75
org33 mean	o	1	1	4.0667	2	4.3333
org34 mean	1	1	1	3.8	1.5	3.9375
org35 mean	1	1	0	4.3333	2.3333	4.5
org36 mean	1	1	0	4.7	2.5	3.9375
org37 mean	o	1	0	3.9	3	4.375
org38 mean	o	1	1	4.2	1.5	4.8125
org39 mean	o	1	1	3.8	2	4.125
org40 mean	1	1	1	4.6	3	3.9375
org41 mean	1	1	0	4.2	3	4.1875
org42 mean	1	1	0	4.6	3	4.375
org43 mean	o	1	1	4.1	2	4.5625
org44 mean	o	1	1	4.2667	2.3333	4.75
org45 mean	1	1	1	4.5	3	4.8125

Source: Survey data

APPENDIX C. ORGANISATIONS MEAN TABLE (TO FOUR DECIMAL PLACES)						
Establishment Ref.	Category of service	Customer input autonomy	Quality of customer inputs	Extent of customer input	Quality control method	Performance for perceived quality
org1 mean	2.7778	4	3.8	1.3333	3.1111	4.2917
org2 mean	3.6667	5	3.9	2.5	3.1667	4
org3 mean	3.8333	5	5	2.5	3.8333	4.9375
org4 mean	4.1667	4.5	4.8	3	3.5	4.5625
org5 mean	3	4.5	4.3	3	3.6667	4.0625
org6 mean	2.8889	2	3.6	1.6667	2.7778	4.125
org7 mean	2.8889	5	3.2667	0.33333	3.2222	4.4167
org8 mean	3.5	5	4.2	2.5	3.5	3.9375
org9 mean	3.3333	4.5	4.5	2	3	4.1875
org10 mean	3.5	4	3.9	2.5	3.3333	4.1875
org11 mean	3.1667	3	4.5	2.5	3.1667	3.875
org12 mean	3.5	5	4.3	2.5	3.3333	4.375
org13 mean	3.6667	4.5	4.1	2.5	3.5	3.8125
org14 mean	2.7778	4.6667	4.3333	2.3333	3	3.75
org15 mean	3.1667	4.5	4	2.5	3	4.25
org16	3.5	4.5	4	2.5	3.5	3.4375

mean						
org17 mean	3.1111	2.6667		1.3333	2.5556	4.125
org18 mean	3	4.6667	4.5	3	3.4444	4.541667
org19 mean	3.3333	5	4.2	3	3.3333	4.25
org20 mean	3	4.6667	3.2	2.6667	3.2222	3.6667
org21 mean	3.3333	5	4.2	3	3.5556	4.5
org22 mean	2.5	3	4.4	2.5	3.3333	4.25
org23 mean	3.3333	5	4.6	3	3.5	4.625
org24 mean	3.6667	4.6667	4.4667	3	3.3333	4.375
org25 mean	3.6667	4.5	4.5	2.5	3.8333	4.125
org26 mean	3.1667	5	4.6	3	3.5	4.0625
org27 mean	3.6667	4	3.4	2.5	3.1667	3.9375
org28 mean	3.6667	4.3333	4.6667	3	3.3333	4.291667

org29 mean	2.8333	4.5	3.6	3	3.8333	3.9375
org30 mean	2.3333	5	4.3	3	3.5	4.25
org31 mean	3.5	3.5	4.22	3	3.5	4.0625
org32 mean	4.1667	4	4.2	3	3.1667	4.75
org33 mean	2.5556	4.6667	4.0667	2	3.5556	4.3333
org34 mean	3.5	4.5	3.8	1.5	3.3333	3.9375
org35 mean	4.1111	3.6667	4.3333	2.3333	3.1111	4.5
org36 mean	4.3333	5	4.7	2.5	2.6667	3.9375
org37 mean	3	5	3.9	3	3	4.375
org38 mean	2.8333	5	4.2	1.5	3.6667	4.8125
org39 mean	2.7778	4.3333	3.8	2	3.3333	4.125
org40 mean	3.3333	4.5	4.6	3	3.1667	3.9375
org41	4.1667	4.5	4.2	3	3	4.1875

mean						
org42 mean	3.1667	4.5	4.6	3	3	4.375
org43 mean	2.6667	5	4.1	2	3.6667	4.5625
org44 mean	3.1111	5	4.2667	2.3333	3.6667	4.75
org45 mean	3.6667	5	4.5	3	3.3333	4.8125
overall org. mean	3.3074	4.4407	4.1959	2.4852	3.3161	4.2357
standard deviation	0.4784	0.6882	0.3988	0.5976	0.2939	0.3252

Source: Survey data

The critical values of t distribution are calculated according to the probabilities of two alpha values and the degrees of freedom. The Alpha (α) values 0.05 one tailed and 0.1 two tailed are the two columns to be compared with the degrees of freedom in the row of the table.

α (1 tail)	**0.05**	**0.025**	**0.01**	**0.005**	**0.0025**	**0.001**	**0.0005**
α (2 tail)	**0.1**	**0.05**	**0.02**	**0.01**	**0.005**	**0.002**	**0.001**
df							
1	6.3138	12.7065	31.8193	63.6551	127.3447	318.4930	636.0450
2	2.9200	4.3026	6.9646	9.9247	14.0887	22.3276	31.5989
3	2.3534	3.1824	4.5407	5.8408	7.4534	10.2145	12.9242
4	2.1319	2.7764	3.7470	4.6041	5.5976	7.1732	8.6103
5	2.0150	2.5706	3.3650	4.0322	4.7734	5.8934	6.8688
6	1.9432	2.4469	3.1426	3.7074	4.3168	5.2076	5.9589
7	1.8946	2.3646	2.9980	3.4995	4.0294	4.7852	5.4079
8	1.8595	2.3060	2.8965	3.3554	3.8325	4.5008	5.0414
9	1.8331	2.2621	2.8214	3.2498	3.6896	4.2969	4.7809
10	1.8124	2.2282	2.7638	3.1693	3.5814	4.1437	4.5869
11	1.7959	2.2010	2.7181	3.1058	3.4966	4.0247	4.4369
12	1.7823	2.1788	2.6810	3.0545	3.4284	3.9296	4.3178
13	1.7709	2.1604	2.6503	3.0123	3.3725	3.8520	4.2208
14	1.7613	2.1448	2.6245	2.9768	3.3257	3.7874	4.1404
15	1.7530	2.1314	2.6025	2.9467	3.2860	3.7328	4.0728
37	1.6871	2.0262	2.4315	2.7154	2.9853	3.3256	3.5737

38	1.6859	2.0244	2.4286	2.7115	2.9803	3.3190	3.5657
39	1.6849	2.0227	2.4258	2.7079	2.9756	3.3128	3.5581
40	1.6839	2.0211	2.4233	2.7045	2.9712	3.3069	3.5510
41	1.6829	2.0196	2.4208	2.7012	2.9670	3.3013	3.5442
42	1.6820	2.0181	2.4185	2.6981	2.9630	3.2959	3.5378
43	1.6811	2.0167	2.4162	2.6951	2.9591	3.2909	3.5316
44	1.6802	2.0154	2.4142	2.6923	2.9555	3.2861	3.5258
45	1.6794	2.0141	2.4121	2.6896	2.9521	3.2815	3.5202
46	1.6787	2.0129	2.4102	2.6870	2.9488	3.2771	3.5149
47	1.6779	2.0117	2.4083	2.6846	2.9456	3.2729	3.5099
48	1.6772	2.0106	2.4066	2.6822	2.9426	3.2689	3.5051
49	1.6766	2.0096	2.4049	2.6800	2.9397	3.2651	3.5004
50	1.6759	2.0086	2.4033	2.6778	2.9370	3.2614	3.4960
51	1.6753	2.0076	2.4017	2.6757	2.9343	3.2579	3.4917
52	1.6747	2.0066	2.4002	2.6737	2.9318	3.2545	3.4877
53	1.6741	2.0057	2.3988	2.6718	2.9293	3.2513	3.4838
54	1.6736	2.0049	2.3974	2.6700	2.9270	3.2482	3.4800

LIST OF INTERVIEWED ORGANISATIONS (HOTELS AND RESTAURANTS)

HOTELS WITH ACCOMODATION

1. 680 Hotel
2. Lilian towers
3. Emerland hotel
4. Hotel boulevard
5. Hotel Kerspinski
6. Metro hotel

RESTAURANTS WITHOUT ACCOMODATION

7. San barners restaurant
8. City star restaurant
9. Tribeka restaurant
10. Kaldis restaurant
11. Java house
12. G &R restaurant
13. Fanaka restaurant
14. Apple green restaurant
15. Rosario restaurant
16. Vimac restaurant
17. Savannis
18. Arziki restaurant
19. Mediteraneo restaurant
20. Gibsons
21. Giggle restaurant
22. Rayan restaurant
23. Havanna
24. Debonnaires
25. Pronto café restaurant
26. Highlands restaurant
27. Petma restaurant
28. Steers
29. Omega restaurant
30. Bejos restaurant
31. Orient restaurant
32. KFC
33. Lavish lounge
34. Kaluphus restaurant
35. Mashariki restaurant
36. Hamdi restaurant
37. Hoggers restaurant
38. Galitos
39. Fiesta restaurant
40. Barbers oasis restaurant
41. Rovers restaurant
42. Click restaurant
43. Seasons restaurant
44. Casual bite restaurant
45. Cuban restaurant