A STUDY OF SERVICE QUALITY ON CUSTOMER SATISFACTION

In Motortraffic Department In Trincomalee District

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ABSTRACT

This research examines the study of service quality on customer satisfaction in a motor traffic department in Trincomalee district. Today in this modern world one of the basic necessities the people is transport. This service is essential not only to the trading community but also to the entire society as a whole. According to the pilot study, 30 questionnaires issued (January 2012) for customers to identify the service quality in motor traffic department, customers are moderately satisfied their services in Trincomalee district. The objective of the study is, to identify the factor which determines the service quality, to identify the factors which influence the customer satisfaction, to find out the relationship between service quality and customer satisfaction of the motor traffic department and provide the suggestion to enhance the customer satisfaction through service quality of the motor traffic department. Conceptual variables are tangible, reliability, responsiveness, assurance and empathy. Two hundred clients were selected sample from systematic random sampling method. A questionnaire was issued to those clients. Data's are analyzed by descriptive, bivariate and multivariate analysis. All five variables are moderate support for the research. As per the multiple regression analysis, 39 percent of the variance is found in the customer satisfaction. Suggest some recommendation to improve customer satisfaction. Expand the infrastructure facilities, adequate training for employees to handing the modern equipment and good communication between the customer and management.

Key Words: Service quality, Customer satisfaction, Customer Expectation

1.1 Background of the study

Now a day's transport activities are an important role as a support service to satisfy the needs and wants of commercial institution and private individuals. Service quality involves a comparison of expectations with performance. According to Lewis and Booms (1983) service quality is a measure of how well a delivered service matches the customers' expectations.

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Generally the customer is requesting a service at the service interface where the service encounter is being realized, and then the service is being provided by the provider and in the same time delivered to or consumed by the customer. The main reason to focus on quality is to meet customer needs while remaining economically competitive at the same time. This means satisfying customer needs is very important for the enterprises to survive. The outcome of using quality practices is understanding and improving of operational processes, defining problems quickly and systematically, establishing valid and reliable service performance measures and measuring customer satisfaction and other performance outcomes.

In Sri Lanka the motor traffic department was established by the government to look into the administration of activities connected with motor traffic. This department administrates its functions as the executive authority and the head of the department is situated in Colombo. There are two main motor traffic departments in Trincomalee district. In that one is operated by the central government and other one is operated by the provincial government. The provincial motor traffic department has 10 branches in Trincomalee district. They are Thampalakamam, Muthur, Kinniya, Seruwela, Kanthale, Moraveva, Komarangadava, Kuchchaveli, Pathavisripura, and Eachilampattu. Motor traffic department was established in Trincomalee in 1989.

The research was carried out to find out the relationship between the service quality rendered by the motor traffic department in Trincomalee district and the customer satisfaction

1.2 Problem Statement

According to the pilot study (30 questionnaires issued in January-2012) researcher perceived customersare moderately satisfy the services of the motor traffic department in Trincomalee district. Reasons are motor traffic department doesn't do the registration of new vehicles and transfer the ownership of the registration. Researcher going to identify whether the customers are satisfied the service quality of the motor traffic department or not?

1.3 Research questions

Based on the research problem, the following questions are formulated.
- What are the factors determining the service quality?
- What are the factors influence in the customer satisfaction?
- What is the relationship between service quality and customer satisfaction?
- How can improve satisfaction of customers through service quality of motor traffic?

1.4 Objectives of the study

The objectives of this study are as follows.
- To identify the factor which determines the service quality
- To identify the factor which influences in the customer satisfaction
- To find out the relationship between service quality and customer satisfaction of the motor traffic department.
- To provide the suggestion to enhance the customer satisfaction through service quality of the motor traffic department.

1.5 Significance of the study

Customer is the main person to be considered for the organizations to achieve their targets. Any organization wishing to achieve its target should ensure customer satisfaction. Hence the organization should be considered about the consumer's actual position; behaviour and their expectation keep the level of satisfaction of their services.

1.6 Limitations of the study

- The research is limited to Trincomalee district.
- Only two hundred customers selected as a sample.

1.7 Conceptual Framework

The researcher can explain the relationship between two vehicles. A set of variables contributed in forming a concept. Here service quality and customer satisfaction are as two concepts.
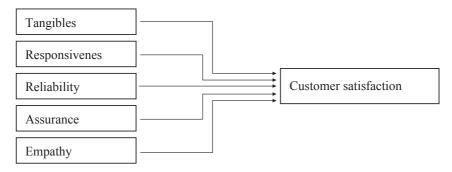

Figure-1 Conceptual Framework
Source- Philip Kotler & Kevin Lane Keller, (12th Edition). (2007). Marketing Management

Definition of key concepts

Parasuraman et al. (1985) suggested SERVQUAL as a determinant and measuring instrument of service quality. The following conceptual variable definitions as follows.

Reliability: It is the ability to perform the promised service dependably and accurately.

Responsiveness: It is the willingness and or readiness of employees to help customers and to provide prompt service, timeliness of service.

Tangibles: It is the state of facilitating good, physical condition of the buildings and the environment, the appearance of physical facilities, tools and equipment used to provide the service.

Service quality: Perceived service quality has been defined as customers overall impression of the relative inferiority / superiority of the organization and its services. (Biter and Hubert 1994)

Customer satisfaction: Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations.

Assurance: According to parasuraman at.el (2006) SERVQUAL"s assurance dimension address, the completeness of the firm, the courtesy it extends its customers and the security of its operations. Competence pertains to the firm's knowledge and skill in performing its service security is also an important component of the assurance dimension. Security reflects a customer's that he or she is free from danger, risk and doubt.

Empathy: According to parasuraman at el (2006) empathy is the ability to experience. Another's feelings as one's own. Empathetic firms have not lost touch with what it is like to be a customer of their own firm. As such empathetic firms understand their customer needs and make their services.

1.8 Hypothesis

The following hypotheses were developed for testing.
H1 : There is a significant relationship between the tangible and customer satisfaction.
H2: There is a significant relationship between responsiveness and customer satisfaction.
H3: There is a significant relationship between reliability and customer satisfaction.

H4: There is a significant relationship between assurance and customer satisfaction.

H5: There is a significant relationship between empathy and customer satisfaction.

1.9 Research sample

Motor traffic department's clients were selected as sample of this study. In this research stratified random sampling method is used to get data from the customers.

Sample
This research is confined to a sample identified from Trincomalee District. The sample size of customers is 200.

Table-1 Sample

Name of division	No of customers	Percentage	Sample
Trincomalee Town &gravets	1505	150.5	151
Thampalagamam	79	7.9	8
Muthur	110	11	11
Kinniya	150	15	15
Seruwela	12	1.2	1
Kanthala	96	9.6	10
Moraweva	4	.4	-
Komarangadava	3	.3	-
Kuchchaveli	17	1.7	2
Pathavisripura	4	.4	-
Eachilampattu	20	2	2
Total	2002	200	200

Source: Motor Traffic Department Register - 2011

Operationalization

Table-2 Operationalization

Concept	Dimensions /Indicators	Measurement
Tangible	Appearance	Questionnaire
	Physical facilities	Questionnaire
	Equipment	Questionnaire
Responsiveness	Seriousness	Questionnaire
	Consideration	Questionnaire
	Politeness	Questionnaire
Reliability	Believability	Questionnaire
	Honesty	Questionnaire
	Accurately	Questionnaire
Assurance	Freedom from danger	Questionnaire
	Risk	Questionnaire
	Ease of contact	Questionnaire
Empathy	Understanding the customer	Questionnaire
	Effort	Questionnaire
	Consideration	Questionnaire
Customer satisfaction	Expectations	Questionnaire
	Respective	Questionnaire
	Repeat	Questionnaire

Source:-Develop for research purpose

2.0 Data collection method

The relevant data for the purpose of this study were collected from primary and secondary sources, primary data collected through survey method and secondary data were collected from documents of publications.

Data collection techniques

In the questionnaire, there are 36 questions. The numerical values have been given for the purpose of quantification of quantitative variable as follows: The customer can choose one of them on the following scale. Strongly disagree-1/disagree-2/Neutral-3/Agree-4/Strongly agree-5

Based on the mean value (Xi) compare with the mean value 3 the following decision rule can be applied.

Decision Rule

The range of the data presented as follows.

Table-3 Decision rule

Range	Results
$1 \leq Xi \leq 2.5$	Service quality leads to low level of customer satisfaction
$2.5 < Xi \leq 3.5$	Service quality leads to moderate level of customer satisfaction
$3.5 < Xi \leq 5$	Service quality leads to high level of customer satisfaction.

(Source: Developed for Research purpose)

Since Xi – mean value, where i = 1, 2, 3, 4,5 which indicate,
X1 – Tangibles /X2 – Responsiveness/X3 – Reliability /X4 – Assurance/ X5 – Empathy

2.1 Method of data analysis

Methods of analysis used to find out the relationship between the variables in research. There are a number of statistical tools are used for this purpose.

Correlation analysis

The technique is used to find out the relation among the variables. Therefore mainly two variables should be taken in this case.

- Dependent variable - customer satisfaction
- Independent variables - service quality

In order to carry out the research, techniques that correlation coefficient analysis are being   used to find out the relationship between variables.

Regression analysis

Regression analysis is to describe the nature of the relationship between two variables in terms of mathematical equations. This analysis is used to estimate of the dependent variable for given values of the independent variable. It also provide and estimates of the effect on the mean value of Y of one unit change in X. This analysis enables the researcher to estimate this slope and to test hypothesis concerning its value.

2.2 Data Analysis

The research information section consists of related questions about tangibles, responsiveness, reliability, assurance and empathy
The range of the data presented as follows.

$1 \leq Xi \leq 2.5$ service quality leads to low level of customer satisfaction.
$2.5 < Xi \leq 3.5$ service quality leads to moderate level of customer satisfaction.
$3.5 < Xi \leq 5$ service quality leads to high level of customer satisfaction.

Descriptive analysis

Table-4 Descriptive analysis

Variable	Mean	Standard Deviation
Tangibles	3.3108	0.751
Responsiveness	3.2458	0.6605
Reliability	3.25	0.59778
Assurance	3.3717	0.54647
Empathy	3.3517	0.66934

Source-Survey data

According to the descriptive analysis all the variables are moderately supported to the customer satisfaction.

Correlation Analysis

Table-5 Correlation analysis

Variables	Customer Satisfaction	Tangible	Reliability	Responsiveness	Assurance	Empathy
Customer Satisfaction	1	.474**	.477**	.477**	.550**	.452**
Tangible	.474**	1	.494**	.573**	.466**	.411**
Reliability	.477**	.494**	1	.604**	.593**	.351**
Responsiveness	.477**	.573**	.604**	1	.493**	.331**
Assurance	.550**	.466**	.593**	.493**	1	.540**
Empathy	.452**	.411**	.351**	.331**	.540**	1

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix shows statistically significant correlations in the expected direction between service quality and customer satisfaction.

According to the correlation analysis, tangible (p<0.01), reliability (p<0.01), responsiveness (p<0.01), assurance (p<0.01) and empathy (p<0.01) positively correlated with job performance.

Regression Analysis

Table-6 Regression analysis

		t value	Significant
Adjusted R2	0.392		
Constant	0.384	2.815	.005
F value	26.612		.000
Beta			
Tangible	.151	2.104	.037
Responsiveness	.147	1.923	.050
Reliability	.255	1.338	.183
Assurance	.167	3.282	.001
Empathy	.104	2.489	.014

Source-Survey data

The value of coefficient of determination (R Square) as indicates that almost thirty nine (39%) of the variance in perceived customer satisfaction can be accounted for by tangle, responsiveness, reliability, assurance and empathy of motor traffic department in Trincomalee district. The F value is 26.612, which is significantly at 95% confidential level, which suggests that the three independent variables have significantly explained 39.2 percent of the variable in the customer satisfaction.

2.3 Hypothesis Testing

H1: There is a significant relationship between the tangible and customer satisfaction.
According to the researcher finding that tangible and customer satisfaction are significantly correlated at 0.01 significance level (ß value is 0.151,p<0.05).Therefore null hypothesis rejected, (H1) is accepted.

H2: There is a significant relationship between the responsiveness and customer satisfaction.
Based on the researcher finding that responsiveness and customer satisfaction are significantly correlated at 0.01 significance level (ß value is 0.147, p<0.05). Therefore (H2) is accepted.

H3: There is a significant relationship between the reliability and customer satisfaction.

According to the researcher finding that reliability and customer satisfaction are not significantly correlated at 0.01 significance level. Therefore (H3) hypothesis is rejected, the null hypothesis is accepted.

H4 :There is a significant relationship between the assurance and customer satisfaction.

According to the researcher finding that assurance and customer satisfaction are significantly correlated at 0.01 significance level (ß value is 0.255, p<0.05). Therefore null hypothesis is rejected, (H4) is accepted.

H5 :There is a significant relationship between the empathy and customer satisfaction.

According to the researcher finding that empathy and customer satisfaction are significantly correlated at 0.01 significance level (ßvalue is 0.167, p<0.05). Therefore null hypothesis rejected, (H5) is accepted.

2.4 Discussion

Tangibles

This variable consists of three dimensions such as appearance, physical facilities and Equipment. While analyzing the tangible of perceived service quality of the motor traffic department in Trincomalee district. The mean value has 3.311 and standard deviation 0.751. The conclusion is that, nearly 50% of customers agreed motor traffic department's facilities, duties, location, parking facilities, modern looking equipments and adequate knowledge. If a department is in urban area customers easily sort out their problems. There is not enough infrastructure facilities in the department. Sometime customers have to wait for a long time. But there aren't enough seats to sit there. All the documents are kept in the one room. That room is like a store room. But other district motor traffic departments have more facilities better than Trincomalee. There are only 5 employees are working now, no minor staff also. But, 11 employees are in the provincial motor traffic department   to do only one activity, provincial department main duty is collecting the revenue only . So that department runs well. There isn't a separate place for parking for customers.   There is only one computer in the department for their work and there are no online facilities to customers. Motor traffic department hasn't neat data and information. When customers asked last year details, department couldn't give accurate. Employees don't give proper explain to customers, customers spend a lot

of hours and days with the department.

Responsiveness

This variable consists of three dimensions such as seriousness, consideration and politeness. The mean value has 3.2458 and standard deviation 0.66055. The conclusion is that most of the customers are moderately satisfied with the responsiveness of services of the motor traffic department. To compare the services of agents and motor traffic department. Those who depend on agents, they can spend more money, but work complete very easily. When we consider to the registration of new vehicles, motor traffic department takes 3 weeks time, the agent takes only one week. Based on this research 50% of customers earn below Rs 20,000 and they get the education knowledge up to GCE A/L. Customers are facing the problem for fill the registration form. They couldn't fulfill their needs on time.

Reliability

This variable consists of three dimensions such as believability, honesty and accuracy. The mean value has 3.25 and standard deviation 0.59778. The conclusion is that, most of the customers are moderately satisfied in their reliability of the services motor traffic department. Nearly 4000 motor bikes sell in Trincomalee in 2011, even though only 2000 vehicles are registered by motor traffic department. The department takes more than a certain period. Therefore customers depend on agents and pay more money. So that the motor traffic department gives priority to agents. The following table shows the difference of the government and agent.

Vehicles	Department		Agent
	Motor bicycle	Rs 2700	Rs 6500
Light Vehicle	Motor van, Car	Rs 9500	Rs 14000
	Three wheeler	Rs 4800	Rs 7500
Heavy vehicle		Rs 14000	Rs 20000

Source : Motor traffic department & Agent

Assurance

This variable consists of three dimensions such as freedom from danger, risk, and ease of contract. Mean value have 3.3717 and standard deviation 0.54647. The conclusion is that, most of the customers are moderately satisfied with their assurance of the services Motor Traffic Department. Customers facing the problems are they call and ask the clarification but no any reply by employees, don't have the facilities of internet access.

Customers ask doubts employees act as busy. There is no suggestion box to inform deficit of department.

Empathy

This variable consists of three dimensions such as understanding customer, effort and consideration. The mean value has empathy 3.3517 and standard deviation 0.66934 . The conclusion is that, most of the customers are moderately satisfied in their empathy of the services Motor Traffic Department.

Customers facing the problems are they don't know the actual values of registration, ownership transferring and needed copies of documents. Employees should give clear information about new things like emission test. If motor traffic department gets number plates from head office, department doesn't inform customers. Sometimes customers come to take over 3 months also. The department doesn't disclose important matters to customers.

2.5 Conclusions

Customersatisfaction is the happiness or displeasure of a customer after they receive a product or a service. Servicequality is a comparison of expectations with performance. In this research conceptual variable (tangible, responsiveness, reliability, assurance and empathy) moderately support to the customer satisfaction of the motor traffic department.

2.6 Recommendations

Based on the problems suggestions are given below.

Tangibles

1. Provide the online services to the customers.
2. If Motor traffic department is in an urban area, customers can perform their needs without delay.
3. Provide the adequate training for employees in handling the modern equipments.
4. Expand the infrastructure facilities, can reduce the difficulties of department.
5. The department should fill its cadre. If more employees in department, can do work quickly.

Responsiveness

1. The motor traffic department should constantly improve its services by providing communication between customer and management.
2. If the department provides three language forms to customers, customers can fill those forms in their language. Otherwise customers will face a lot of problems.
3. Staff should will answer client questions. This is attractive to customers

Reliability

1. The level of the service should same at all times of customers.
2. Statements or record should keep clear and correct. Employees should identify the customers' wants and   needs.
3. Motor traffic departments should keep records without error.

Assurance

1. The motor traffic department should provide the adequate training to improve the skill of handling the customers' problems easily.
2. Employees should help to fill forms and give clear information.
3. Motor traffic departments keep maintain the documents securely.

Empathy

1. Motor traffic departments should give clear instruction to fulfill the motor vehicle registration form and transfer of ownership details.
2. Motor traffic departments should release charges for each service through   their notice board.

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