

FOREIGN TRAVELLERS' PERSPECTIVE TOWARDS SERVICE QUALITY OF RAILWAY SERVICE IN SRI LANKA; A STUDY BASED ON KANDY RAILWAY TRAVELLERS

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Abstract— Quality of the product or service is considered as a primary indicator of organizational performance. Every organization make an attempt to put their maximum effort to cater better goods and services which fulfills customer satisfaction by drawing attention towards quality of them. Thus it is need of the hour to identify the potential of generating income from the transport sector, especially in Railway transport sector. Satisfying foreign travellers' travel experiences in positive way will make a win –win situation of both sectors, Travel and Tourism. The main objective of this study is to identify the Relationship prevailing between the Quality Dimension in foreigners' satisfaction on railway transport in Sri Lanka. Sub objectives are 1.To Identify the mostly impact service Quality Dimension towards foreigners' satisfaction on railway transport in Sri Lanka 2. To identify the service Quality Dimensions which should be developed in order to attract foreigners to the railway transport method in Sri Lanka. SERVQUAL model is used to identify the service quality dimensions towards customer's satisfaction. Primary data are obtained from 50 foreign railway travellers drawn using Convenience Sampling method. Questionnaire was used as strategic tool to gather data. Descriptive statistics, linear regression model Karl Pearson's correlation are used to analyze the data. Analyzed data revealed that there is a positive relationship between foreign traveler's satisfaction on railway service and service quality dimensions other than Assurance and Empathy in SERVQUAL model. Tangibility, Reliability and Responsiveness dimensions have low level positive impact on their satisfaction. Assurance and Empathy are the service quality dimensions which should be developed in railway service in order to attract more foreign railway travelers to get generated the more tourists' receipts as they indicates negative relationships towards their satisfaction on railway service.

Keywords—; Customer Satisfaction, Service Quality, SERVQUAL model

I. INTRODUCTION

Sri Lanka is marching towards the steady economic growth modern highly competitive global economy. This favorable competitive market environment prevails among all parts of the island and it makes a continuous incensement in demand for goods and services. The continuous incensement in economic development criteria such as Gross Domestic Product (GDP), per capital Income, Export volume, Tourism receipts etc; persuade that the present Sri Lankan Economy is marching in search of competitiveness in the global market. By transferring Agriculture centered economy to service centered economy structure within few decades after the independence in 1948 clearly highlighted that manufacturing sector and service sector of the country are restructuring to face this future challenge.

Within few decades, service sector became cardinal as well as dominant sector in Sri Lankan Economy. With the identification of the structural trends, many service sector organizations are initiated and carrying out in aim of get generated the profit and make it maximize by fulfilling customers' needs and wants. When we look at the service sector components of Sri Lanka, Tourism sector is highlighted as a significant and fast growing service sector component among other sectors such as garment, banks, transport etc. (Central Bank Annual Report 2014)

According to the annual report of SLTDA in 2014, highlights that the tourists arrival made a significant record in history of tourism industry in Sri Lanka in the final quarter of the year 2013 by recording the arrival of hundred thousand travellers within a one year. Keep going, it is reported the tremendous annual incensement in number of tourist's arrival to Sri Lanka, by reporting the same number of the tourists in the month of September, before starting the final quarter in following year 2014 (Annual Report SLTDA).With the significant pattern in tourism arrivals, tourism sector of Sri Lanka became one of the cardinal foreign exchange earner as well as the fast growing sector in Sri Lanka. (Airport and survey highlights 2012).

Therefore it is need of the hour to identify the significant factors in tourism in Sri Lanka to get maximum contribution to the country. For the time being less attention was drawn towards the tourism inbounds transport and its' quality by the government sector. (Kumarage 2004). Luxury railway train, luxury busses are the inbound travelling methods introduced by the Sri Lankan government for the foreigners. Those travelling methods are also very open to the locals and not specifically launch for the foreigners.

Inbound air travel method conducted by Sri Lankan Air lines under the name "Sri Lankan Air Taxi" also ceased due to the lack of profitability and government accredit the opportunity of inbound air transport method to the private sector.

In order to get generated higher profits margin from the transport sector in Sri Lanka, Government should make attention towards the foreign travellers also for inbound travelling and make strategies to make a win-win situation in both tourism sector as well as transport sector.

Among those transport methods available in Sri Lanka, railway transport method can be used to generate more income from tourists as it is considered as low cost and enjoyable travel method in Sri Lanka by both local and foreign passengers. By attracting foreigners, and provide them an unforgettable experiences on local transport system, Railway Department can be increased their revenues (Performance Report 2013).

To obtain the desired profit from the railway transport method, government should draw their attention towards the proper business strategies. (Wold bank Report)

When we look at the Marketing literature, many researchers identified that fulfilling customer satisfaction can be used as a successive business idea which leads to the success of the business. (Parker and Mathews 2001, Gustafson 2005). And also Kotter and Keller (2014) highlighted that retaining customers and attract new customers can be considered as one of the key elements of achieving pre-determined goals and objectives of an organizations. It persuades that satisfying customers, (Customersatisfaction) is a prudent strategy to retain customers in an organization. Customers' satisfaction is defined as persons' feelings of pleasure or disappointment resulting from comparing product's perceived performance in relation to his or her expectations (Kotler 2003).

Many Researchers (Saravana and Rao 2007, Choocharukul and Sriroongvikarai 2013, Gupta et al 2005) identified that there is a positive relationship between service quality and the customer satisfaction. Further (Parasuraman et al 1985) identified when the service quality

is high, it will lead to incensement of the customer satisfaction.

And also it is revealed that customer satisfaction is based on the level of service quality provided, by the service provider (Lee et al 2000).

Due to intangible in nature service quality is difficult to measure as compare to products and the characteristics of service appears to be difficult and considered as a complicated task. The first comprehensive service quality model was coined by the (Parasuraman et al 1988).with the further studies carried out to calculate the difference between customer expectations and perceptions and they were represented as "gap 5". And SERVQUAL instrument was introduced which is consisted with service quality dimensions, can be measured. The five gap service quality dimensions are namely Empathy, Assurance, Tangibles, Reliability and Responsiveness. Today, SERVQUAL is most commonly used model in order to measure the service quality in different industries such as health care, education, transport etc and it had been used in almost all the countries such as USA, UK, Australia, Cyprus, China etc.

literature shows that the Railway services in some South Asian countries are not address the customers' perspective efficiency. (Chandrakumara2015 ,Rahaman et al 2009). Therefore it's a need of the hour to identify the overall customers' satisfaction towards the service quality of the public transport especially in railway transport. By satisfying the travellers in providing them a quality service is the most essential objective of the railway department of Sri Lanka to develop this transport sector in Sri Lanka. Therefore this paper address whether the quality of the service provided by Railway Department in Sri Lanka make a sufficient contribution towards the foreign travellers' satisfaction.

A. Problem Statement

This study draws the attention regarding the impact of service quality dimensions towards the foreigners' satisfaction on railway transport in Sri Lanka. Therefore this study addresses the main problem of "What type of Relationship is prevailing between the Quality Dimension and foreigners' satisfaction on railway transport in Sri Lanka?". The sub problems of the study derived from major problems are, 1. What is the most impact service Quality Dimension towards foreigners' satisfaction on railway transport in Sri Lanka? 2. Which service Quality Dimensions should be improved to develop in order to attract foreigners to the railway transport method in Sri Lanka? Based on above data, the study objectives are clearly identified. Thus,

the main research objective is to identify the Relationship prevailing between the Quality Dimension and foreigners' satisfaction on railway transport in Sri Lanka. Sub objectives are 1. To identify the highly impact service Quality Dimension towards foreigners' satisfaction on railway transport 2. To identify the service Quality Dimensions which should be improved to develop in order to attract foreigners to the railway transport method in Sri Lanka?

II. METHODOLOGY.

This is a descriptive quantitative study in nature. 50 sample units are drawn for the sample and foreign tourists are considered as the sample units.

Kandy Railway Station is took into accounts as Sample area due to the following reasons. Kandy is a Tourism Destination and Colombo- Kandy railway line is one of the major railway lines in Sri Lanka which attract the tourists in natural beauty due to the diversification in geographic. Also Kandy is considered as a secret city of Buddhists people's (including locals and foreigners) because of the Temple of tooth Relic, therefore railway service provide tremendous service to the passengers who travel to Kandy city. And also Kandy Railway Station performs as a hub of conducting the Operational activities to Kandy – Colombo, Kandy –Mathele, Kandy –Badulla Destinations. Therefore considerable amount of Tourists are catered facilities by this Kandy Railway Station. English literacy (Reading and writing English) and above 18 years old tourists passengers are considered as an inclusive criteria for sample. Inability peoples in reading and writing English, Children (below 18) are considered as exclusive criteria.

Questionnaire which was designed with five Likert scale, was used as strategic tool to obtain data. Therefore primary data is used for this study. To measure the service quality SERVQUAL model is used. Service quality dimensions identified through the SERVQUAL model such as Tangibles, Reliability, Responsiveness, Assurance, and Empathy are developed as an Independent Variable. Customer satisfaction is considered as a Dependent Variable which also measured using five Likert scale.

Descriptive Statistics, Generalized Linear Regression Model and Karl Persons' Correlation are used to analyze the data using R Statistical software.

III. RESULTS AND DISCUSSION.

A. Sample profile

50 sample units are considered for this study. Among these 50 sample units 76% are males and 24% are female representations. Sample is drawn from 19 countries and their percentages presented in Table no 01 and Figure no 01. . The composition of the countries is represented from Eastern countries to Western countries. Majority foreigners are drawn from United Kingdom followed by Germany. 8.5 % are from United State of America and 4.3% are from China and 2.1% from Japan. The composition of the sample clearly goes with the statistics of annual tourists arrivals by countries on Annual reports of the SLTDA. Among the sample units 67% are repeat tourists and 33% are first time visitors.

Table no 01 Foreigners sample profile Countries

Source- Survey 2016

Figure no 01 Foreigners sample profile Countries

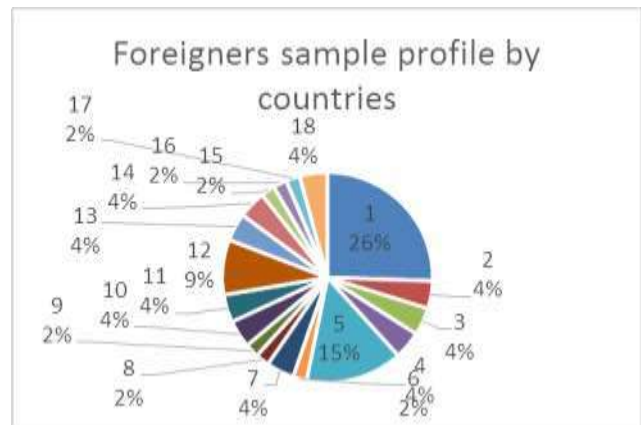


Table no 02 is highlights the descriptive statistics which are obtained for the considered service quality dimensions in SERVQUAL model. By using five likert scale questionnaire, considered variables are measured in Statistical software.

Table no 02 Sample descriptive Statistics

	Tangibl e	Reliabil ity	Responsivene s	Assuranc e	Empath y
mean	2.915	3.24	3.493	3.635	3.206
Standard Error	0.531	0.822	0.842	0.855	0.854
Minimu m	2	1.5	1.25	1	1.2
Maximu m	4.25	5	5	5	5

Source- Survey 2016

Unweighted SERVQUAL score results are as follows in Table No 03. Total average values which obtained from the SERVQUAL model gaps (Perceptions - Expectations).

Table No 03 unweighted SERVQUAL Scores.

Quality Dimensions	Unweighted SERVQUAL score
Tangibility	0.505
Reliability	0.71
Responsiveness	0.75
Assurance	0.52
Empathy	0.64

Source- Survey 2016

The unweighted SERVQUAL score highlights that the quality dimension "Responsiveness" has a big gap between perception and expectation towards the railway service in Sri Lanka. The Quality Dimension "Tangibility" has less gap between perception and expectation.

A. Regression Analysis.

No	COUNTRY	Percentage (%)
1	UK	25.5
2	Spain	4.3
3	Romania	4.3
4	Finland	4.3
5	Germany	14.9
6	Scotland	2.1
7	Australia	4.3
8	Japan	2.1
9	Singapore	2.1
10	India	4.3
12	China	4.3
13	USA	8.5
14	Check Republic	4.3
15	France	4.3
16	Belgium	2.1
17	Italy	2.1
18	Holland	2.1
19	Austria	4.3

The relationship between SERVQUAL model service quality dimensions and the customer's satisfaction are identified in a generalized Linear Model. The model which is developed as follow.

Table no 04 Regression output

Var 01= Tangible, Var 02= Reliability, Var 03= Responsiveness, Var 04= Assurance Var 05 = Empathy

Coefficients:

	Estimate	Std. Error	adj (P)
(Intercept)	2.22930	0.663	0.002
Tangible	0.23747	0.2074	0.002
Reliability	0.43594	0.1561	0.008
Respons.	0.25013	0.1504	0.001
Assurance	-0.08534	0.188	0.000
Empathy	-		
	0.16856	0.1917	0.0384

Source-Survey 2016

Call: glm(formula = Intercept + var.01 + Var .02 + var03 + var4 + var.5)					
Coefficients:					
(Intercept)	var.01	var.02	var03	var4	var.5
2.22930	0.23747	0.43594	0.25013	-0.08534	-
0.16856					

B. Correlation coefficients

Table no 05 highlights the Correlation coefficients of the variables

	<i>Customer Satisfaction</i>	<i>Tangible</i>	<i>Reliability</i>	<i>Responsiveness</i>
Customer Satisfaction	1			
Tangible	0.325812	1		
Reliability	0.462509	0.298843	1	
Responsiveness	0.38067	0.3968	0.441274	1

$$Y = 2.23 + 0.24X_1 + 0.44X_2 + 0.25X_3 - 0.85X_4 - 0.17X_5$$

X1= Tangible, X2= Reliability, X3 = Responsiveness,

X4= Assurance X5 = Empathy

According to the Regression model there is a positive relationship is prevailing between foreigners' satisfaction on railway service and SERVQUAL model service quality dimensions such as Tangible, Reliability and Responsiveness. But negative relationship is prevailing between service quality dimensions such as Assurance, Empathy and customer satisfaction. It is highlighted that SERVQUAL model quality dimensions, except Assurance and Empathy are impact on the foreign travelers' satisfaction toward the Railway service in Sri Lanka.

Source- Survey 2016

According to the analyzed data reveals, that the more effective SERVQUAL model service quality dimension among foreigners towards their satisfaction on railway transport method is "Reliability". Service quality dimension "Tangible" is less impact to the foreign travelers' satisfaction on railway transport method. The service quality dimensions ASSURANCE and Empathy are the service quality dimensions which should be drawn by the Authority to develop the railway service in Sri Lanka.

IV CONCLUSION AND RECOMMENDATIONS

Among SERVQUAL models' service quality dimensions, Tangibility, Reliability and Responsiveness are effect positively on foreign traveler's satisfaction on railway travelling experiences. The quality dimension "Reliability" is the most affective among them in a less powerful correlation between variable. (it obtained 0.46 coefficient in correlation). All the positively impact dimensions are not highly impact on foreigners satisfaction as all of them obtained less than 0.5 for correlation coefficient values. "Tangibility" of the railway service is less powerful quality dimension. "Assurance" and "Empathy" quality dimensions are the less attention service quality dimension drawn by Railway Authority when providing the railway service. Further it reveals that railway Authority should draw their attention towards the service quality dimensions in proper manner to develop the railway service among Foreigners. Less attention service quality dimensions such as "Assurance" and "Empathy" should be properly plan to take them a in an income generation process. Following actions can be implemented to make the railway service in to appropriate way to attract the foreigners.

1. Diversification railway service packages with tangible items such as high technological ticketing system, accurate and fast reservation system, fine dine areas can be introduced to uplift the tangibility of service.
2. Active and accurate Travel information centers can be implemented with the tourists' security system.

3. Awareness programs about the important places, current places indicators should be implemented to provide them a better travel experience. to ensure the Reliability of the service.
4. Proper method should be implemented to get the foreigners comments, feedback and take responsible actions to reduce the inconveniences that they faced while travelling by train.

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