

CUSTOMER SATISFACTION TOWARDS THE RAIL SERVICES IN MALAYSIA AND THAILAND

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ABSTRACT

Rail industry is most popular mode in land transport among the commuters for short and long distance movements in all countries. In 2018, rail industry transported about 37 million in Malaysia and Thailand approximately 35 million passengers in overall types of services. The demand expected to be increased from time to time and depending on the improvement in the services. One of the problems for future improvement is the quality of the services and their focus in enhancing on passengers' requirements. The research discusses on the development of service quality of rail services and cross border in Malaysia and Thailand. It also investigates empirically towards customers' satisfaction for rail industry and based on the present problems towards the services in the industry. This is a quantitative research with relevant literature with variables dimensions and using descriptive analysis to validate on the data obtained. The survey was conducted among

rail users using questionnaires among 300 respondents and based on their satisfaction on service quality, reliability, facilities and accessibility. This research uses the theory of Customer Satisfaction Index (CSI) to measure the level of satisfaction among respondents. This study was analyzed using Statistical Package for the Social Sciences (SPSS) and the results indicated that service quality, reliability, facilities and accessibility are playing the significant relationship towards customers' satisfaction for rail services. It also suggests that the accepted variables are able to be used in future initiatives in developing the customers' satisfaction in the operators of rail industry at both countries.

Keywords: Rail industry, Customer Satisfaction Index, Service quality, reliability, facilities, accessibility.

INTRODUCTION

Road traffic congestion is still one of the major problems, especially in the city areas in Malaysia and Thailand. Congestion was due to the growing number of traffics recorded every year in meeting with their personal commitment. The increased of private vehicles have led to accelerate in traffic congestion and accidents. In mitigate this problem, government had encouraged to use public transport road such as buses, taxies and rails for specific movements. Public use the services of public transport to move from one place to another for the purpose of daily jobs, businesses and tours. One of the popular modes is using rail transport which the costs of the movements are cheaper than others. However, there were problems in public transport which not satisfied by customers with their services especially in rail industry. This research focuses on public transportation managed by Keretapi Tanah Melayu Berhad (KTMB) and State Rail of Thailand (SRT) which involved on passengers, commuter coaches and cross border activities. Better public transportation systems shall be benefited to the communities and generate economy in several countries (Dirgahayani, 2013)

Rail Transport in Malaysia and Thailand also recorded better in term of services and has positive impacts economically in term of supply and transport demand from the public. Therefore the certain improvements on the services are able to transform for the better smooth movement and improve the connectivity with other modes of transport. The passengers movements were recorded approximately about 37 Million for KTMB and 35 Million for SRT annually (Jeevan, Chen, & Cahoon, 2018). Indirectly passengers are preferred to use rail for long distance movements and daily commuting due to the option, price and scheduled coaches. Passengers' preferences were due to lower fare prices, better scheduling, reliable and invite further in group movements and commuting activities. Beside that the industry also recorded several complaints from the passengers due to uncomfortable condition, facilities and service rendered by the rail industry before, during and after the movements. This is because rail transport services at both countries have yet to establish and reaches until to the maximum level of the customers' satisfaction. This study has developed the framework and based on the customers' responses in the past. The framework was established in order to ensure the objectives on customers' satisfaction and met and the proposed of the research questions as suggested. The details of the research questions are as follows:

- a. What are the relationship between customer satisfaction and service quality in rail industry?
- b. What are the levels of passenger's reliability towards customers' satisfaction in rail industry?
- c. How to determine the level of customer satisfaction towards facility in rail industry?

d. What are the relationship between customer satisfaction and accessibility in rail industry?

LITERATURE REVIEW

Customer satisfaction is a personal feeling was adopted from evaluation in using a product or services. This measure of customer satisfaction can show how an organization performs or provides a product or service to their customers. Consumer satisfaction has been widely accepted as an important issue for many marketing managers. It is commonly used as a benchmark of a company's success (Bennett & Rundle-Thiele, 2004) cited in (Czeplle & Rosenberg, 1977). (Schwarz et al., 2013) reported about the evolution and limitation of CSI models used by past researchers. In others word, customer satisfaction is used to see if the customer is satisfied or otherwise with a product, service, or experiences. The customer satisfaction was given a few definitions which can be in various circumstances and they are constantly identified with both products and services **Invalid source specified..** (Iacobucci, Ostrom, & Grayson, 1995), (Iacobucci et al., 1995) revealed on the SERVQUAL is a service-quality framework that has been incorporated into customer to indicate the gap between customer expectations and experience and the evolution and future of customer satisfaction index models. SERVQUAL is still the most vital construct to measure the service quality (Akbaba, 2006). The quality in transport is a significant determinant of demand. Several studies (Sunday, Waheed, Isiaka, & Oluremi, 2015) posits on the factors influencing the information and communication technology (ICT) in service providers which is one of the factors developing the quality when engaging with customers. (Caro & García, 2007) is measuring on the quality in the service sector and the instrument is supported by the model which forms the conceptual framework for the development of the scale on service quality. (Al-Rousan & Mohamed, 2010) refers to Five (5) dimensions of service quality such as Reliability, Responsiveness, Assurance, Empathy and Tangible. (Ittner & Larcker, 1998) revealed on customers satisfaction through Ten (10) indicators such as listening , Be responsive, Be a human, know your customers, happy employees, customer first, brand awareness, keep organized, measurement and improve comfortable journey. (Parasuraman, Berry, & Zeithaml, 1990)) posits on the delivering on service quality dimensions, balancing customer perceptions and expectations with five(5) indicators include service quality items such as Reliability, Assurance, Tangibles, Empathy, Responsiveness.

In the competitive environment, quality are important for customer retention and it also has effects on the performance and economic results of the organization (Stopka, Šimková, & Konečný, 2015). (Chan & Ho, 2019), in general quality refers to standard or how something is good or bad. (Prapinit, Sabar, & Melan, 2019) revealed on the demand for logistics management studies should be extended all service providers in order to understand on the quality services as a general. Dimensions of reliability focus on the ability of organization staff to fulfill their promise by providing quality service to customers. (van Campen, Sixma, Friele, Kerssens, & Peters, 1995) referred on the reliability and conveniences are considered as important in determining satisfaction. Facilities include areas, building and maintenance are allow people to use them as tools or systems that facilitate their activities. (Akanmu, Azizi, Hassan, & Melan, 2019) revealed on the relationship between logistical support factors, and also refers on the suggestions on the

logistical support in providing facilities towards customers' satisfaction. (Halizahari & Mustakim, 2016) referred to the initiatives to prolong aging assets life cycle which is applicable in rail industry. They stressed on maintenance schedules towards facilities to ensure long lasting and safe for passengers. Therefore, all facilities provided should be maintained in order to improve on customers' satisfaction and reliable services in the long run.

Accessibility is the word used to describe whether a product, devices, services, or environments can be used by all peoples in abilities or disabilities. Shawn Lawton, (Henry, Abou-Zahra, & Brewer) referred on accessibility is the design of products, devices, services, or environments so as to be usable by people and disabilities. Apart from that, frequency of service also will effect on customer satisfaction. (Jalil, Prapinit, Melan, & Mustafa) revealed on an adoption of business intelligence, technological, individual and supply chain efficiency, which refer to quality, accessability and reliable services in service providers. (Waddell, 2000) revealed on the accessibility can be viewed as the ability to access and benefit from some system or entity. The concept focuses on enabling access for people with disabilities, or special needs, or enabling access through the use of assistive technology, however, research and development in accessibility brings benefits to everyone. This research has developed in the part of literature as the underpinning theory and based on the relationship of customer satisfaction towards service quality, reliability, facility and accessibility.

Theoretical Framework and Hypothesis

The literature review allows the formulation of conceptual framework with hypotheses, and shows the relationship between the independent variables (IV) and dependent variable (DV). The proposed framework has developed in Four (4) as the main indicators (IV) towards the customers' satisfaction (DV). Figure 1 refers to the Theoretical Framework as proposed.

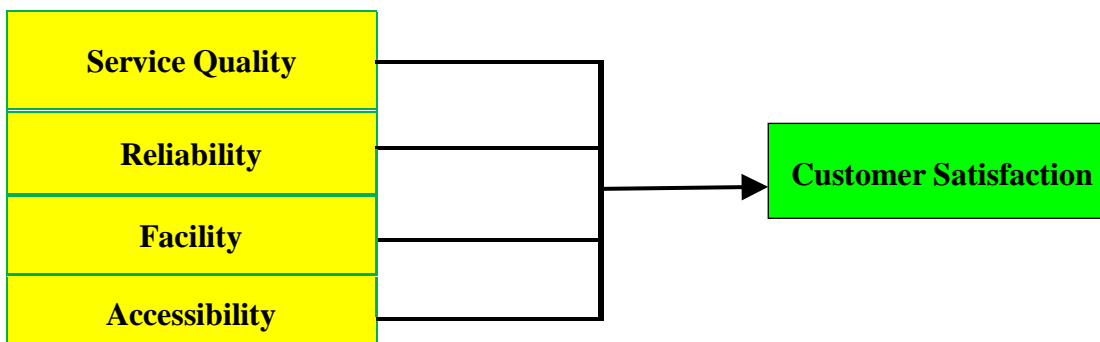


Figure 1: Proposed Research Framework

The following hypotheses are proposed:

- H1: There is a significant relationship between service quality towards customer satisfaction.
- H2: There is a significant relationship between reliability towards customer satisfaction.
- H3: There is a significant relationship between facility towards customer satisfaction.
- H4: There is a significant relationship between accessibility towards customer satisfaction.

RESEARCH METHODOLOGY

The research is using descriptive statistic to describe and understand the features of a specific data which measures the mean, median and mode. (Triyono, 2019) refers on the descriptive statistic is defined as a research method that describes the characteristics of the population or phenomenon. The cross-sectional research is used to gather data and information from the passengers including the commuters of KTMB and SRT and identify on the problem through survey design. In a cross-sectional study, investigating measures on the outcome and exposures for the participants at the same time. In short, the researchers enable to study an individual between two or more variables. This study conducted with a cross-sectional for respondents through questionnaire. The measurement was performed by using multi items scale with 5-point Scale Likert.

RESEARCH FINDING

Demographic of Respondents

The respondents' profile is a descriptive analysis that deals with all descriptions made by the respondents in the questionnaires. The demographic profile of the study includes gender, age, religion, race, marital status, job status and salary. Total respondent is 300 and divided into 50/50 basis in two countries. The surveys were conducted at the major cities such as Kuala Lumpur and Bangkok as well as cross border areas of Padang Besar and Hadyai . This research focuses on customer satisfaction in KTMB in Malaysia and SRT in Thailand rail services which involved with passenger movements. Table 1 , refers to the demographic respondents for the purpose of the study .

Table 1

Demographic Respondents

Demographic	Category	Frequency	Percentage (%)
Gender	Male	170	56.7
	Female	130	43.3
Age	18-20 years	78	26.0
	21-23 years	122	40.7
	23-25 years	64	21.3
	25 years and above	36	12.0
Religion	Muslim	182	60.7
	Non-Muslim	122	39.3
Race	Malay /Thailand	160	53.3
	Chinese /Thailand	98	32.7
	Indian /others	42	14.0
Marital status	Single	277	92.3
	Married	23	7.7
Job status	Employees	45	15.0
	Unemployed	105	35.0
	Students	150	50.0
Salary	Below RM1000	249	83.0
	RM 1000 (B7410)-RM 2000(B14,800)	33	11.0
	RM2000(B14,800)and above	18	6.0

Note* N=300

The number of female respondents (130) was less than male (170). It represented a ratio of 43.3% (female) and 56.7% (male) respectively.

Reliability Analysis

The function of the reliability is to measure the stability and overall performance of the system combined from the variables. In Reliability test, the Cronbach’s Alpha is a measure of internal consistency or considered to be measure of scale reliability. Table 2, refers the results of the Cronbach’s Alpha on the reliability of the instrument and internal consistency coefficient is between scores ranging from 0.00 to 1.00.

Table 2

Reliability Statistics of Variables

Variables	Item	Cronbach Alpha
Customer satisfaction	5	0.705
Service quality	4	0.643
Reliability	5	0.719
Facility	5	0.847
Accessibility	4	0.771

The reliability of the questionnaire was using Cronbach’s coefficient alpha calculated to test the reliability of the responses obtained from the respondents. Cronbach’s alpha of .70 and above is good, .80 and above is better, and .90 and above is best. However, if reliability values of 0.60 to 0.70 are still acceptable in exploratory research (Nunnally & Bernstein, 1994). Most of the variables are accepted in this study.

Multiple Regression Results

A Multiple Linear Regression was performed to determine the best set of predictor variable in predicting customer satisfaction.

Table 3

Multiple Regression Results

Model Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.272	.238		1.141	.255
SERVICE QUALITY	.204	.054	.212	3.754	.000
RELIABILITY	.116	.054	.116	2.149	.032
FACILITY	.220	.054	.223	4.043	.000
ACCESSIBILITY	.212	.051	.224	4.180	.000

Based on Table 3, all predictor variables which are service quality ($p=0.000 < \alpha$), reliability ($p=0.032 < \alpha=0.05$), facility ($p=0.000$), and accessibility ($p= 0.000 < \alpha$) were found to be significant in explaining customer satisfaction in KTMB and SRT services. Meanwhile, there are no result shows any variables are not significance as well.

Summary of Hypotheses

All hypotheses were supported (H1, H2, H3, H4) and have significant and influence positively towards customer satisfaction. Besides, accessibility makes the strongest contribution and followed by facilities, service quality and reliability to attract public using KTMB and SRT services.

Table 4

Model Summary

Hypothesis Testing	Results
H1: There is a significant relationship between service quality towards customer satisfaction.	Supported
H2: There is a significant relationship between reliability towards customer satisfaction	Supported
H3: There is a significant relationship between facility towards customer satisfaction	supported
H4: There is a significant relationship between accessibility towards customer satisfaction	Supported

CONCLUSION

In conclusion, identifying the level of customer satisfaction of KTMB and SRT rail services are more likely to consider on the factors leading to customers’ satisfaction for future improvement towards the quality of services offered. This research has contributed to the body of knowledge by confirming the reliability on customers’ satisfaction through literature and survey. The findings shown, all independent variables which are service quality, reliability, facility and accessibility have a positive relationship on customers’ satisfactions. All stated variables are important factors influencing the customer satisfaction in KTMB and SRT rail services. In overall, the study had satisfied with the services as provided by KTMB and SRT but certain improvement needs to be made based on suggested variables of the study. Through the progress and improvement for the suggested variables are able to put the KTMB and SRT in the world standard and made as people choice in using the public transport in Malaysia and Thailand. The suggestions made in the study are able to make as the guidelines for rail service providers in ensuring for the better and important for the services on rail industry at both countries. In future studies the research is planning to expend the remaining variables as suggested in the literature and to ensure for the better rail transport services at both countries.

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