

[LOG 15] HOW SERVICE QUALITY AFFECTS THE CUSTOMER SATISFACTION: CASE STUDY OF ELECTRIC TRAIN SERVICE (ETS)

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ABSTRACT

Service quality played the important role and it affected to the customer satisfaction. Service quality has become a distinct and important aspect of the product and service offering. In this study, we investigated the effects of service quality on customer satisfaction in electric train service (ETS) industry Malaysia, focusing on the five dimensions in service quality which is tangible, responsiveness, assurance, reliability and empathy. We use questionnaire to collect the data from ETS passenger at northern region Malaysia KTMB station. The hypotheses on the causal relationships among service quality and customer satisfaction were tested by using IBM SPSS Statistics version 23 statistical technique. The results show negative correlation between the customer satisfaction and five dimensions in service quality. This study helps ETS to know about their customer satisfaction and can help they improve their service quality if there got any weaknesses. Future research needs to be done to investigate in details about this study.

Keywords: *service quality, customer satisfaction, Electric Train Service (ETS)*

INTRODUCTION

Background of study

Service quality is debt delivery from supplier to the buyer or purchaser. The description of excellence can vary from person to person and from situation to situation. The quality of service definitions varies only in writing, but they usually involve determining whether the provision of the service received meets, exceeds or fails to meet customer expectations (Cronin and Taylor, 1992; Oliver, 1993; Zeithaml, Berry and Parasuraman, 1993). The quality of service is defined as the customer's perception of how a service meets or exceeds expectations Czepiel (1990). The quality of service is commonly cited as a prerequisite and critical determinant of attractiveness to establish and maintain relationships with their clients.

Service quality played the important role and it affected to the customer satisfaction. According to Caruana (2002), it has become a distinct and important aspect of the product and service offering. Most of customer prefer to the price not to the service. When the delivery service to customers become a problem when you cannot get the customer based on the price paid for their expectation. In particular, consumers prefer

the quality of service when the price and other cost elements remain constant (Turban, 2002).

Customer satisfaction has been an issue of great concern to organizations and researchers alike. The prime targets of organizations are to maximize profits and to minimize costs. Profit expansion can be achieved through rise in sales with lesser costs. One of the aspects that can help to increase sales is customer satisfaction, because satisfaction indications to customer loyalty (Wilson et al., 2008, p. 79), endorsement and repeat purchase.

Customers became very vital in business during the marketing era of the 1950s when companies could produce what they can sell and not just marketing what they can produce as it was during the production era. Since the beginning of the era of consumer marketing, the focus on customers or consumers increased more as the era of consumption also moved to the post consumption, which are required companies to focus more services in addition to what they offer as offering to its customers (David Armano, 2009). What are the qualities of these services to customers? Therefore, this research originated in the fact that the customer or consumer is the key for enterprises. In fact, your satisfaction is the central tool that helps increase sales and create revenue of the company's position. Moreover, the importance of customer satisfaction and service quality has been proven related to help improve the overall performance of groups (Magi & Julander, 1996, p. 40).

In July 2015, electric train services (ETS) has been first introduced in Malaysia (Anuar, 2015). ETS Express service is the second electric rail service that operated in Malaysia after the commuter service in Kuala Lumpur. ETS Express is the first high speed train in Malaysia. According to (Shripad Shashikant Chopade, 2013), high speed rail can be defined as the rail that running at and above 150 km/h. The ETS routes start from Kuala Lumpur until Padang Besar. ETS first trip departures from KL Central station exactly 9.30 am to carry about 80 passengers. This ETS replaces old train driven by diesel, launched in August 2010 to the routes of the KL-Ipoh. ETS Express service will run twice a day with a ticket price of RM80 for adults and RM40 for children to travel from Kuala Lumpur to Padang Besar, Perlis and reverse back to Kuala Lumpur.

Besides, transporting the passengers, ETS also provide other services like food and beverages (F & B), LED televisions, luggage rack, OKU space, CCTV and toilets. If passenger feel hungry while on the train or want to enjoy a cup of coffee, come to the bar in F & B coaches C. ETS staff are ready to help the passenger to enjoy food, drinks and snacks for a nominal fee. Each coach has 2 LED TV, which showcases the latest news on KTMB and deliver feature films interesting to watch. Meanwhile, ETS are also concerned about the old people and people with disabilities as a privileged user of their services. ETS also provide facilities on the trends that are designed with infrastructure for disabled people, and also have special priority seating available for the elderly and disabled. Please contact ETS at least 24 hours before departure time for them to make early preparations. Passenger can also stop by any of KTMB counter and talk to the friendly staff to help (KTMB Main Administrator, 2016).

Problem statement

This research study was made to investigate how service quality that offer by ETS express affects the customer satisfaction. Service quality plays a big role to determine

the satisfaction of ETS customer and also can affects others factor like business performance, lower costs, and customer loyalty (Gurau, 2003).

Research questions

1. Does reliability influence the customer satisfaction on ETS services?
2. Does responsiveness influence the customer satisfaction on ETS services?
3. Does assurance influence the customer satisfaction on ETS services?
4. Does empathy influence the customer satisfaction on ETS services?
5. Does tangibility influence the customer satisfaction on ETS services?

Research objective

1. To investigate the relationships between reliability and customer satisfaction on ETS services.
2. To investigate the relationships between responsiveness and customer satisfaction on ETS services.
3. To investigate the relationships between assurance and customer satisfaction on ETS services.
4. To investigate the relationships between empathy and customer satisfaction on ETS services.
5. To investigate the relationships between tangibility and customer satisfaction on ETS services.

Significance of study

The significant of this study will give benefits to customer and also society. This is because, service quality plays an important role to make customer satisfied or happy with the service that provide by ETS. When the customer happy, they slightly will come again in future to use the ETS and maybe they will be the loyal customer. This will lead to reduce the ETS company cost because they can save their money to use in marketing. Customer satisfaction also important to keep customer using ETS rather than other modes of transport because nowadays there are so many competitions between transportation industries. Other modes of transport also have increased their service quality to attract society to use their transport. Although ETS are still new in the transportation industry, ETS can still compete closely with other modes of transport such as express bus because of the speed of the ETS have can the reduce travel time to the destination. This will help to improve the economic development of this country because when the service quality that offer by ETS is good, it will attract more customer to use this of transport.

Scope of study

This research focus on the customer or passenger that use ETS service at KTMB Arau Train Station Perlis and KTMB Alor Setar Train Station Kedah. This place was being choose because it was near to researcher place and the time given to finish this research only around three months. Researcher are from University Utara Malaysia which located at Sintok Kedah.

LITERATURE REVIEW

Customer satisfaction

Customer satisfaction important aspect to improve service delivery to customer or user. Customer satisfaction is an overall evaluation for the consumption experience of the customer, every time during the consumption process can cause satisfied or dissatisfied feeling. Hence, increasing quality on a service or product can satisfy the customers and numbers of loyalty customer will be increased as well as. (Wan Tong, 2015). Customer satisfaction is an uncertain element, one certain product may satisfy customer and it may not satisfy another customer. Therefore, to increase the customer's satisfaction the maximum, the factors which may influence customer's satisfaction must be understood properly (People Metrics, 2010).

According to Oliver (1981), Satisfaction is a summary of the psychological state that results when the excitement surrounding the disconfirmed expectations joins with previous consumer feelings about the experience of the consumer (pp. 24). Satisfaction depends on numerous factors and there is no shortage of literature on this theme. To generate the factors that lead to customer satisfaction we look at some research studies developed in this field. (Zheng & Jiaqing, 2007).

However, according to Sigala et al. (2004), terms of satisfaction can be defined as the experience of meeting an expected result. Satisfaction or dissatisfaction with a program or of a physical equipment is influenced by previous expectations regarding the level of quality. Reichheld (2006: 84) argues that measurements of satisfaction do not match the actual behavior of the client. In particular, he argues that a substantial number of respondents who describe themselves as satisfied or very satisfied are defectors and do not show loyalty to the brand that can be expected.

Service quality

Service quality has been defined many way or concept by researcher. For example, service quality was defined as overall customer impression of the relative inferiority or superiority of organization and its services. (Bitner, Booms and Mohr, 1994, p. 97). But, another researcher described service quality as a form of attitude representing a long-run overall evaluation. (Cronin & Taylor, 1994: Taylor & Cronin, 1994). According to Parasuraman et al. (1985, p. 48), service quality on the basis of differences between expectations and performance on the quality dimension. Roest and Pieters said the quality of service is a relativistic intellectual mistake and between the rules and the exhibits about the benefits of the experience-based service.

The quality of services is a concept that has attracted considerable interest and discussion in the research literature because of difficulties both in its definition and measurement without the consent (Wisniewski, 2001). There are a number of different definitions of what is meant by quality of service. One that is commonly used defines the quality of service, such as the degree to which a service meets the needs and expectations of the customers (Wisniewski & Donnelly, 1996). Quality of service can be defined as the difference between expectations of customer service and perceived service.

Lewis and Mitchell (1990) stated that, if expectations are greater than performance, then perceived quality is less satisfactory and, accordingly, customer dissatisfaction

occurs. If the expectations are higher performance, then perceived quality is less than satisfactory and therefore there is customer dissatisfaction. There is always an important issue because why we would measure the quality of service. Actually, measure allows a comparison before and after the changes to the position of quality problems and to establish clear standards for service delivery. The starting point for the development of quality of services is analysis and measurement (Edvardsen, Tomasson, & Ovretveit, 1994). The SERVQUAL approach that discussed in this research study is the most common approach to measuring the quality of the service method.

Based on previous study showed that service quality is important indicator of customer satisfaction (Spreng and Machoy, 1996). Attention to the service quality can make organization different from other organization and gain lasting competitive advantages (Boshoff & Gray, 2004). Usually, customers do not have any information about technical aspects of a services, so that, functional quality become major factor to form perceptions of service quality. (Donabedian, 1982). Service quality can be measure based on customer perception, customer expectation, customer satisfaction and customer attitude (Sachdev and Verma, 2004). Ekinci (2003) stated that the evaluation of service quality can leads to the customer satisfaction. According to Rust and Oliver (1994), satisfaction can be defined as the fulfillment of customer response, which includes an assessment based on emotion of an answering service.

Parasuraman, Zeithaml and Berry (1988, 1990) created a model of service quality that perceived service quality into five dimension. Reliability is about ability to delivery or performing the promised service accurately and dependably. Responsiveness is about the service provider willingly to help customers and provide prompt service. Empathy is part involve caring, individualized attention the firm provides its customers. Assurance is defined as the employee knowledge and courtesy and the service provider's ability to inspire trust and confidence. Tangible is an appearance of physical facilities, equipment, personnel, and communication materials.

Most of customer intention to pay lower prices to receive a good service. Think about this situation, we are willing to pay extra to get better or more effective service. Company that give added service benefit to customer are likely to be winner and gain competitive advantage over rivals.

The underpinning theory - SERVQUAL Theory

Service quality or SERVQUAL theory is a theory model developed by Parasuraman, Valarie A. Zeithaml and Len Berry, in 1988. It highlights the main components of high quality service. The authors of the service quality theory, initially identified ten service quality elements, but in later works, fell in five multi-sized constant reliabilities, assurance, tangible, empathy and responsiveness. Companies using SERVQUAL to measure and manage the quality of the service by using a questionnaire that measures both the quality of customer service expectations in terms of these five dimensions as their perception of the service they receive. When customer expectations are greater than their perceptions of delivery, quality of service is considered low.

In addition to being a measurement model, SERVQUAL is also a management model. The authors identified five SERVQUAL gaps that can cause customers to experience poor service quality. According to (Parasuraman, 1990), service quality is a subjective evaluation that customers arrive by comparing the level of service we believe that an organization must provide the level of service they receive from being delivered. An

extensive qualitative research conducted in the recent past suggests that deficiencies in service quality perceived by customers, for example, the gap between the expectations and perceptions, are caused by a number of organizational shortcomings.

RESEARCH METHODOLOGY

Type of research

This research was made to investigate and determine the relationship between reliability, responsiveness, assurance, empathy, and tangibility as an independent variable towards customer satisfaction in ETS services as a dependent variable. So, this type of research was a quantitative correlation because according to the correlation analysis is useful when researchers are trying to determine whether there is a relationship between two variables. Correlation analysis is useful when researchers are trying to determine if there is a relationship between two variables. It is also important to understand the difference between a statistically significant coefficient of correlation between the variables and the importance to the sample.

Theoretical framework

There are five independent variables that includes in our research which is reliability, responsiveness, assurance, empathy and tangibility.

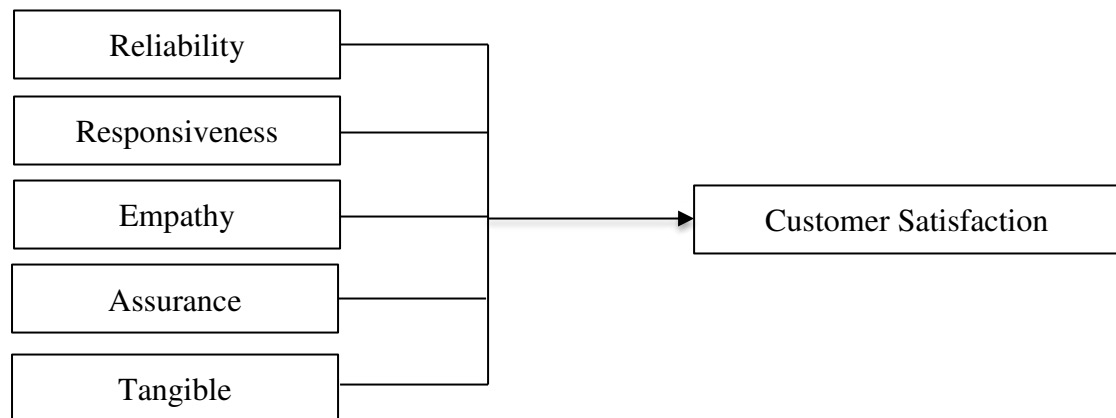


Figure 1
Research framework of customer satisfaction

Research hypothesis

Based on previous study on service quality that we investigate, there are five variables that related to test the customer satisfaction which is:

1. There is relationship between reliability and customer satisfaction in ETS services.
2. There is relationship between responsiveness and customer satisfaction in ETS services.
3. There is relationship between assurance and customer satisfaction in ETS services.
4. There is relationship between empathy and customer satisfaction in ETS services.
5. There is relationship between tangibility and customer satisfaction in ETS services.

Research design

The research design for our research is quantitative correlation research design. The reason we use this type of research design because our research was to study the

relationships of the two variables which is independent variables and dependent variables. According to (Simon, 2011), Correlation studies examine variables in their natural settings and do not include investigator-imposed treatments. Correlation studies show the relationships between technical variables such as cross tabulation and correlations.

Approach

Quantitative correlation study design was appropriate because this method provided answers based on information. This design provides information on the correlation research that addressed the research questions and the objectives of the study. The correlation of the study design was a valid method to explore for service quality, which included reliability, responsiveness, assurance, empathy and tangibility (Bilbo, 2003).

Study setting

The study setting for this research is non contrived setting because research design is correlation and this study setting will invariably with correlation study. Non contrived study setting is a research that do in natural environment like our scope of study which is northern region KTMB station. We will collect the data of our research in this study setting.

Units of analysis

The units of analysis for this research is individual person because our respondents commonly are passenger of ETS services. According to (Dolm, 2010), units of analysis can be defined simply as the subject that is analyzed in a scientific investigation. Determining or being aware of the research unit of analysis has a vital role in any research enterprise.

Time horizon

According to Elli (2011), there two types of time horizon for research paper which is cross-sectional and longitudinal. Time horizon for our research study is cross-sectional because this research was make to observe analyses data that we get from population and sampling.

Research instrument

A quantitative research questionnaire was used to answer the research questions and to test the hypotheses. A questionnaire was used to gather data in order to identify and to examine the relationship between customer satisfaction, reliability, responsiveness, assurance, empathy and tangibility.

DATA ANALYSIS

Reliability analysis

Table 1 shows the reliability statistics for our research. In this reliability analysis, we focus on Cronbach alpha. According to (Uma Sekaran, 2013), the accepted value for Cronbach alpha is 0.65 and above. Based on the table above we can see that all the Cronbach value are above 0.65. So, this mean that reliability analysis for all the variable is accepted and reliable.

Table 1
Reliability statistics

| Variables | No. of Items | Cronbach alpha |
|-----------------------|--------------|----------------|
| Tangible | 5 | .689 |
| Responsiveness | 5 | .722 |
| Assurance | 4 | .714 |
| Reliability | 5 | .700 |
| Empathy | 4 | .654 |
| Customer Satisfaction | 4 | .739 |

Correlation analysis

Table 2
Correlation between 2 variables

| | Tangible | Responsiveness | Assurance | Reliability | Empathy |
|-----------------------|----------|----------------|-----------|-------------|---------|
| Customer Satisfaction | .446** | .471** | .466** | .418** | .467** |

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

Based on the Table 2 above, the p value for all the variables is $p=0.000$. This shows that all the variables are significant because significant level is $p < 0.01$. So, all the hypothesis is supported.

Meanwhile, the value of correlation for all variables is below 0.5. This shows that the relationships between all independent variables and dependent variables has a negative relationship.

Regression analysis

Table 3
Model summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .555 ^a | .308 | .296 | .52447 |

a. Predictors: (Constant), Tangible, Responsiveness, Assurance, Reliability, Empathy

b. Dependent Variable: Customer satisfaction

Based on the Table 3 above it shows that R Square value is 0.308, means that 30.8% variability of ETS passenger is satisfied conclude by empathy, assurance, reliability, tangible and responsiveness.

Table 4
ANOVA

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 34.917 | 5 | 6.983 | 25.388 | .000 ^b |
| | Residual | 78.394 | 285 | .275 | | |
| | Total | 113.311 | 290 | | | |

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Tangible, Responsiveness, Assurance, Reliability, Empathy

Table shows that significant relationships between independents variables and dependents variables, where $F=25.388$ and $p=0.000$ ($\alpha < 0.05$).

DISCUSSION

The objectives of our research study is to investigate the relationships between independents variables which is tangible, responsiveness, assurance, reliability, empathy and dependents variables which is customer satisfaction. The result shows that there are significant relationships between these two variables but has negative relationships.

Based on service quality theory, its stated that tangible, responsiveness, assurance, reliability and empathy will influence the customer satisfaction. The results also show that all independents variables influence the dependents variables. So, this research objective has been achieved.

CONCLUSION

The correlation analysis is beneficial when scholars are irritating to control if there is a connection among two variables. It is also significant to appreciate the change between a statistically important coefficient of correlation between the variables and the position to the sample. Relationship studies show the interactions between technical variables such as cross tabulation and correlations. For the future research, others variables need to be find to investigate the customer satisfaction.

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