Service Quality of Malaysian Public Transports:

A Case Study in Malaysia

LA QUALITÉ DE SERVICE DE TRANSPORTS PUBLICS MALAISIENS:

UNE ETUDE DE CAS EN MALAISIE

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Abstract: This research is about the Service Quality dimensions become the major determinant to influence the Service Quality of public transports in Lembah Bujang area, Kedah Darul Aman, Malaysia. This study has been done in Lembah Bujang area, Kedah. The objective of this research is to investigate the relationship between independent variables which is tangible, reliability and responsiveness dimension that influences the Service Quality of the public transports which is buses and taxis in Lembah Bujang area and which Service Quality dimension are mostly influences the Service Quality. The population of this research is about 300 populations in the Lembah Bujang housing area phase one area which is frequent public transports user. In this study, convenience sampling was used which is only 169 respondents were selected. The researcher use Descriptive Statistic, Pearson Correlation, Multiple Regressions and Cronbach's Alpha in order to analyze the data gathered by using Statistical Package for Social Sciences (SPSS) version 15.0. The result indicates there are positive correlations between Service Quality and tangible, reliability and responsiveness of Service Quality dimensions. The most Service Quality dimensions influence the Service Quality is tangible dimension which is focuses on Cleanliness/Comfortable of physical facilities. For the future research it can determine the others important factors that influences the service quality of the public

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transports also needs to focus on others service quality dimension which is empathy and assurance in SERVQUAL model of Service Quality.

Key words: Service Quality; Tangible; Reliability; Responsiveness; Public Transports

Résumé: Cette recherche porte sur la dimension de la qualité des services, ce qui est devenu le facteur déterminant qui influe sur la qualité de service de transports publics dans la g région Lembah Bujan, Kedah Darul Aman, en Malaisie. Cette étude a été réalisée dans la région Lembah Bujang, Kedah.L'objectif de cette recherche est d'étudier la relation entre les variables indépendantes qui sont les dimension de la tangibilité, de la fiabilité et de la réactivité qui influencent la qualité de services de transports publics, c'est-à-dire les autobus et les taxis dans la région Lembah Bujang et la dimension de qualité de service qui influe le plus sur la qualité de service. Les sujets de cette recherche sont d'environ 300 personnes dans les quartiers d'habitation de Lembah Bujang, qui sont des utilisateurs fréquents de transports en commun. Dans cette étude, l'échantillon de convenance a été utilisé et seulement 169 répondants ont été sélectionnés.Les chercheurs ont utilisé la statistique descriptive, la corrélation de Pearson, les régressions multiples et l'Alpha de Cronbach afin d'analyser les données recueillies à l'aide du paquet statistique pour les sciences sociales (SPSS) version 15.0. Le résultat indique qu'il y a une corrélation positive entre la qualité de service et la tangibilité, la fiabilité et la réactivité des dimensions de la qualité de service. La dimension de qualité de service qui influence le plus la qualité de service est la dimension tangible qui met l'accent sur la propreté / le confort des installations physiques. Pour les futures recherches, on peut déterminer d'autres facteurs importants qui influent sur la qualité de service des transports publics, pourtant on doit également se concentrer sur d'autres dimensions de qualité de service qui est l'empathie et l'assurance dans le modèle SERVQUAL de la qualité de service.

Mots-Clés: qualité de service; tangible; fiabilité; réactivité; transports publics

1. INTRODUCTION

The public transportation is all modes provided by the government to the public such as buses, taxis, monorail, train and others. This service provided by the government in order to give more convenience towards people for urban and rural areas to move (White, 2002). The service that able to meets the requirement and desire through the people perception will determine the level of service quality in the public transports. The service quality in the public transports can be measured by SERVQUAL dimension which is focuses in term of tangibles, reliability and responsiveness (Parasuraman et. al., 1985). The service quality of the public transports becomes important issue in order to have better and comfortable environment. The service quality of the public transport in that area seems unsatisfied and average level, which are physical facilities in term of cleanliness and comfortableness, punctuality, frequencies and responsiveness of the driver and conductor of the public transports. Is it the quality services of the public transports are really implemented well in this country whether in urban or rural areas? This is because more allocation provided to reconstruct the quality of public transport. Therefore this research try to investigate the relationships between the service qualities of the public transport delivered in Lembah Bujang area in Kedah, Malaysia.

The issues in service quality of the public transports in Malaysia are become unsatisfied and in the average level, therefore it is not satisfy the consumer needs and expectation. The public transports that

available in this country such as buses, trains, taxis and others was provided by the government towards publics use. The implementation of the service quality for these public transports is not really executed well which is be concerned by the Malaysia prime minister.

The current issues and problems regards the time arrival delaying in the Light Rail Transit (LRT) and Keretapi Tanah Melayu Berhad (KTMB) public transports when the Malaysia Prime Minister himself take the experienced by went and used that service. He was not satisfied with the service quality provided by this public transports after used the LRT service in term of punctuality and frequencies of train arrive this is because insufficient space to carry more passengers and others whereby the congestion occurred (Utusan, 2008).

This issue showed even the public transportation is modernized and in the urban areas but service quality is still lacking and not well implemented. This will lead to negative perception and not satisfy the consumer using the public transports (Karen Thompson, Peter Schofield 2002). The problems also faced by the people in urban areas which in Kuala Lumpur capital of Malaysia, the bus was still late despite the route stating that the bus would arrive every 15 minutes, but the user waiting until half an hour. This is punctuality problems faced by the public buses in Malaysia (The Star, 2008).

The second incident occur one month after the first issues that stated above, in 25 September 2008 at urban area which is Kuala Lumpur when two LRT train Rapid KL clashing each other in 200 meter from Bukit Jalil station (The Star, 2008). This incident also showed the problems of the service quality in term of safety measurement of the public transports become worse and in the critical case. Therefore the quality in term of service must be concerned extremely because to make sure the peoples or user satisfied and give positive perceptions towards the public transports provided as well as in urban or rural areas. In the face of such a fierce scenario, the public transport sector cannot limit itself to maintaining its current level of performance.

Generally in term of physical facilities of the public transports are insufficient, this is because the public buses mostly not provided convenience facilities to the disable person which is use wheelchair to board. The public buses mostly not provided the ramps to give more disable person more convenience to use that kind of the public transports. This is different in another country Japan, Tokyo which is their public transport system and the built environment are fully accessible (Malay Mail, 2009). They have portable ramps in all train stations where there is a difference in height between the platform and train and stations masters are always ready to assist wheelchair users when requested.

The benefits that the researcher is hoping to find from this study is to reveal the service quality problems that should be identify and solve by focusing service quality dimensions in public transports. The result of this study it will provide relevant information for service quality must be improvised in this rural areas public transportation. The results from this research also to know the level of expectation perception of Lembah Bujang residents about service of public transports delivered. This research to identify the relationship between service quality in term of tangible dimensions (cleanliness/ comfortableness of physical facilities) towards public transportation in Lembah Bujang area and to identify the relationship between service quality in term of reliability dimensions (punctuality/ frequencies) towards public transportation in Lembah Bujang area. Besides that this study is to identify the relationship between service qualities in term of responsiveness (attitudes/ willingness employees) dimensions towards public transportation in Lembah Bujang area.

The concept of service quality is regarding outcomes, satisfaction and other intangibles of public transport expectations and along with the facilities and more tangible aspect of public transports physical elements (Fodness & Murray, 2007). Service quality also involves the perception and expectation of the service level delivered to the user which is meets their needs. The quality service also regarding the consumer expectations on service environments, process and the output quality they can see themselves and received (Low Yoke Kiew & Lee Kum Chee, 2002).

Cleanliness and comfortable of the public transport is one of the appearances which are focuses on the cleanliness of interior, seats and windows of the particular transports. The perception assessment of input quality would include consideration of whether the equipment seem up to date and in good working order; whether waiting areas were appropriately furnished, cleaned, and well and whether

service providers were appropriately attired. The knowledge and skills possessed by employees represent important inputs to service production. This showed the service quality in the public transport focuses in term of tangible dimension. The physical appearances such as the condition of the interior in the public transport are one of the measurements in service quality (Parasuraman, et. al., 1988).

Reliability is focusing on frequencies and punctuality of the public transport arrives on time and able to meet the perception expectation of the user. Reliability means the ability to perform the promised service dependably and accurately (Parasuraman, et. al., 1988).This reliability dimension of quality in the public transport is focuses on frequencies of the public transport available in the particular areas. The measuring arrival of the public transport at the destination on time is of limited usefulness and will give positive impact towards the public expectation and perceptions.

The punctuality elements have a relationship with satisfaction of the user were identified by using PCA on performance scale (Thompson & Schofield, 2002).Therefore this indicates the perception and expectation of the user will indicate the service quality of the public transport delivered. The PCA scale of performance showed the importance of the reliability as a generic attribute of service quality in public transport. The punctuality measured in term of time arrival and departure is important elements in reliability service quality of dimension; this is because the previous study showed in the public bus service reliability has a preference to the user determine the perception and expectation towards the particular bus service. This is showed in the service of quality attributes and levels in this case, therefore this indicate user not satisfied with the punctuality or reliability of the public service because the bus lateness to reach to the destination (Eboli & Mazzula,, 2008).

The buses, airlines, trains, taxis and others public transports service measurement in term of expectation and perception will be as assessment tool that gives accurate comparative indicators based on performance rather than subjective opinions (Headley & Bowen, 1997). The punctuality and frequency of the public transport effects the satisfaction of the user because the satisfaction is measured by the indicators of perceptions and expectations which is related to the service quality (Eboli & Mazzula, 2008).

Responsiveness is another quality of dimension in measuring service quality according to the (Parasuraman, et. al., 1988). The responsiveness means the willingness to help customers and provide prompt service to the customers. The employees behavior have similarities with the SERVQUAL dimension of responsiveness, whereby may be related to assurance but with regard to access to information rather than employee knowledge and courtesy scale (Thompson & Schofield, 2002). This showed service quality dimension of responsiveness is related to the attitude of the driver or staff in public transports. This indicates that the customers or user perception and expectation to evaluate the service quality in the public transports are become more important.

In other services like in passenger expectations of airport service quality there are significant relation and more accurately reflect between passenger expectations and perceptions on attitudes and behavior of the employees in that particular service (Fodness & Murray, 2007). In other studies at UK's Midlands operator Trent Buses conducted a thorough research with a view to improving services and recognized customers' top requirements are reliability/frequency of services, friendliness of services, clean bus interiors, comfort, value for money, clean bus exteriors, easy access, reasonable fares, and easy to understand and remember timetables (Andaleeb et. al., 2007). This indicates one of the requirements is friendliness of service means the behavior of the driver or employees to behave in politeness and friendly with the customers.

2. METHODS AND MATERIALS

There are three hypothesis developed in this study, namely (a) there is a significant relationship between dimension of tangible and service quality of the public transport in Lembah Bujang area in Kedah, (b) there is a significant relationship between dimension of reliability and service quality of the public

transport in Lembah Bujang area in Kedah and (c) there is a significant relationship between dimension of responsiveness and service quality of the public transport in Lembah Bujang area in Kedah.

The researcher's used simple random samplings which are 300 respondents were selected. The data was collected using questionnaire. Questionnaire is a written set of question to which respondent record their answer (Uma Sekaran, 2006) . The data was analyzed using statistical software tool (SPSS 15.0) with the uses of Cronbach's Alpha, Pearson Correlation, Descriptive Statistic, and Multiple Regression Analysis. The researchers do the pilot study before distribute to the respondents. 30 respondents were chosen in order to know the questionnaires constructed are reliable and understand by the respondents. This reliability analyzed through Croncbach's Alpha value at 0.903.

3. RESULTS AND DISCUSSION

3.1 The Pearson Correlation

The Pearson Correlation analysis obtained for the three intervals scaled variables shown in the table below. This findings show whether the hypothesis is rejected or not rejected. As indicated in Table 1, there is a significant difference between dimension of tangible and service quality of the public transports in Lembah Bujang area.Table 1 shows there is a significant relationship between Tangibles Dimension and Service Quality where $p < 0.01$ (p= 0.000) and r= 0.703. So, the researcher does not reject the H1.

In Table 2, there is a significant difference between dimension of reliability and service quality of the public transports in Lembah Bujang area. Table 2 shows there is a significant relationship between Reliability Dimension and Service Quality where $p < 0.01$ (p= 0.000) and r= 0.625. So, the researcher does not reject the H2.

In Table 3, there is a significant difference between dimension of responsiveness and service quality of the public transports in Lembah Bujang area. This Table 3 shows there is a significant relationship between Responsiveness Dimension and Service Quality where $p < 0.01$ (p= 0.000) and r= 0.519. So, the researcher does not reject the H3.

3.2 Multiple Regressions

The result of this regression is an equation that represents prediction of a dependent variable from several independent variables. This analysis is used when independent variables are correlated with one another and with the dependent variables.

In the *Model Summary* in Table 4, the R Square (0.547), which is the explained variance, is actually the square of the multiple R (0.74)2. The *ANOVA* in the Table 5 shows that the *F* value of 66.487 is significant at the 0.000 level. In the *df* (defree of freedom), the first number represents the number of independent variables (3), the second number (165) is the total number of complete responses for all the variables in the equation (*N*), minus the number of independent variables (*K*) minus 1. (*N-K*-1) [(169-3-1) = 165]. The *F* statistic produced (*F*= 66.487) is significant at the 0.000 level.

Table 6 helps the researcher to see which between three variables influence most the variance in service quality. The column Beta under *Standard Coefficients*, the researcher found the highest number in the beta is 0.468 for tangible dimension, which is this independent variable, is significant at the 0.000 level.

There are all three hypotheses accepted by the researcher based on the findings. There also comparison and evaluation on the findings by the researcher.

H1: There is a significant difference between dimension of tangible and service quality of the public

transports in Lembah Bujang area.

The hypotheses which is tangible dimension will influence the service quality of the public transports in Lembah Bujang area was not rejected by the researcher due to the there is significant relationship between tangible dimension and service quality. The significant level were p< 0.01 while the finding showed that p = 0.000. It means that tangible dimension influence the service quality of the public transports in Lembah Bujang area.

H2: There is a significant difference between dimension of reliability and service quality   of the public transports in Lembah Bujang area.

The hypotheses which is reliability dimension will influence the service quality of the public transports in Lembah Bujang area was not rejected by the researcher due to the there is significant relationship between tangible dimension and service quality. The significant level were p< 0.01 while the finding showed that p = 0.000. It means that reliability dimension influence the service quality of the public transports in Lembah Bujang area.

H3: There is a significant difference between dimension of responsiveness and service quality of the public transports in Lembah Bujang area.

The hypotheses which is responsiveness dimension will influence the service quality of the public transports in Lembah Bujang area was not rejected by the researcher due to the there is significant relationship between tangible dimension and service quality. The significant level were p< 0.01 while the finding showed that p = 0.000. It means that responsiveness dimension influence the service quality of the public transports in Lembah Bujang area. Based on the findings, the researcher can determine that there is a correlation between reliability dimension and service quality.

There is recommendation from the researcher based on the findings in order to assists the public transports around Lembah Bujang area to improve the service quality of the public transports which is buses and taxis. They should provide comfortable of the passenger seats and internal and external cleanliness also must given priority, the bus and taxis appearance should more good in condition and not using transports which is too old. Besides, they also should provide a good and sufficient bus and taxi stations which is in usable condition.

The public transports which buses and taxis should have systematic the buses and taxis time schedule. Moreover they must provide buses and taxis sufficient in order to avoid from not punctual and arrive on time to the destinations. The attitude of the drivers and conductors of the public transports should be friendlier, often react to the customers' problems, greeting and respects the customers or passengers when they use the public transports. The driver also should drive the transports in safe and careful condition in order to satisfy the customers.

4. CONCLUSION

Based on the outcome of the research, it clearly states that the independent variables influenced the service quality of the public transports in Lembah Bujang, kedah. The first objective is to identify the service quality in term of tangible dimensions (cleanliness/ comfortableness of physical facilities) towards public transportation in Lembah Bujang. Based on the outcome of the research, it clearly states that the tangible dimension influence the service quality of the public transports.Second objectives are to identify the service quality in term of reliability dimensions (punctuality/ frequencies) towards public

transportation in Lembah Bujang area. Based on the outcome of the research, it clearly states that the reliability dimension influence the service quality of the public transports. Third objectives are to identify the service quality in term of responsiveness (attitudes/ willingness employees) dimensions towards public transportation in Lembah Bujang area. Based on the outcome of the research, it clearly states that the reliability dimension influence the service quality of the public transports. Overall the researchers concludes that first, second and third objective which are to identify the relationships between service quality and user perception in term of tangible, reliability and responsiveness of public transports which is buses and taxis in Lembah Bujang area, Kedah have been answered. This research can serve as a guideline to the other service quality dimension which is the heart of SERVQUAL model of Service Quality. Future research should also focus on other service quality dimension which is empathy and assurance in SERVQUAL model of Service Quality.

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TABLES

Table 1: The Relationship between Tangible Dimension and Service Quality in Lembah Bujang area

	Service Quality	Tangible Dimension
Pearson Correlation	1	0.703(**)
Sig. (2-tailed)	.	0.000
N	169	169

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

Table 2: The Relationship between reliability and service quality of the public transports in Lembah Bujang area

	Service Quality	Reliability Dimension
Pearson Correlation	1	0.625(**)
Sig. (2-tailed)	.	0.000
N	169	169

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

Table 3: The Relationship between Responsiveness and Service Quality the public transports in Lembah Bujang area

	Service Quality	Responsiveness Dimension
Pearson Correlation	1	0.519(**)
Sig. (2-tailed)	.	0.000
N	169	169

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

Table 4: Model Summary (b)

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.740(a)	0.547	0.539	2.40592

a. Predictors: (Constant), Responsiveness Dimension, Reliability Dimension, Tangible Dimension
b. Dependent Variable: Service Quality

Table 5: ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1154.571	3	384.857	66.487	0.000(a)
	Residual	955.098	165	5.788		
	Total	2109.669	168			

a. Predictors: (Constant), Responsiveness Dimension, Reliability Dimension, Tangible Dimension
b. Dependent Variable: Service Quality

Table 6: Coefficients (a)

Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	2.121	.996		2.130	0.35
Tangible Dimension	.480	.077	.468	6.255	.000
Reliability Dimension	.217	.071	.227	3.054	.003
Responsiveness Dimension	.103	.045	.147	2.275	.024

a. Dependent Variable: Service Quality