

Rapidkl Bus Service in City Center, Kuala Lumpur, Malaysia: An Epitome of Good Service?

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Abstract

Public transportation in Kuala Lumpur (the capital city of Malaysia) serves the daily commuting needs of all strata of society. To meet the ever increasing needs of reliable public transport in and around the capital city, the Rangkaian Pengangkutan Integrasi Deras Sdn Bhd (RapidKL) has been established. Notwithstanding the effort by the company to provide the best public service, it seems there are more brickbats than bouquet of flowers given at the level of service rendered. Gamut of complaints range from late arrival, overcrowding, poor customer service, and bad general upkeep of the bus to frequent mechanical letdown. Hence, this research attempts to ascertain factors which influence the latitude of customer satisfaction towards RapidKL bus service in the Klang Valley. The picked independent variables of service quality; consumer satisfaction and dissatisfaction are assessed. The findings indentify factors that influence customers' satisfaction to choose bus as a public transportation. The results will be used to suggest plan of improvement so that the public can experience better service in the Klang Valley.

Keywords: Customer satisfaction, RapidKL, perceived quality, customer expectation, and disconfirmation

1. Introduction

Concerns over the feeble public transport service and sustainability of transportation in the Klang Valley have caught the attention of various decision makers, researchers and planners. Countermeasures include new Light Rail Transit (LRT) extensions to congested areas, fare ticket promotion, increase service frequencies, exclusive bus lanes and others. However, the demand on the public transport is still not encouraging. Despite the improvements to the public transport services, statistics (during 1985 to 1997) show that the percentage of public transport modal share has declined from 34.3% to 19.7% (CHKL, 2003). The authors conducted an exploratory study to identify some problems persistently faced daily by passengers using the RapidKL service. The identified problems include the following:

- 1) Service Frequency: fifteen-minute frequency is not the actual performance by the service provider. The frequency is not consistent. Although RapidKL claims that routes are served at fixed frequencies, they are not always the case;
- 2) Capacity: quantity of the bus is still not enough to meet the demand especially during peak hours;
- 3) Poor (unsatisfactory) bus condition: this makes it uncomfortable for passengers to use the service, stranded in the middle of the road and a few could not be started at bus station. The vehicles always brake down on the way;
- 4) Behavior of the bus drivers: negative attitudes shown by the bus drivers, no or little consideration to the passengers when they do not stop at the bus station carefully. Some drivers even refuse to pick passengers up despite space availability; and
- 5) System failures: Touch & Go breakdowns, ticketing machine malfunction when bus drivers lack of technical knowledge in troubleshooting the machine and frequent air-conditioning breakdown in the bus.

Thus, this study intends to ascertain the factors influencing customer satisfaction towards this service as well as the possible solutions to these problems, thus in turn, will enable the authors to provide some suggestions to further enhance RapidKL's service.

2. Background of the Company

Rangkaian Pengangkutan Integrasi Deras Sdn Bhd (RapidKL) is the company tasked with provision of an integrated public transport system in the Klang Valley, incorporating rail and bus services. It was incorporated in July 2004 as part of the restructuring of public transport system in Kuala Lumpur and started operation in November of the same year. RapidKL today transports approximately 4 million customers per week: 2.1 millions on the Ampang Line (formerly known as STAR-System Transit Aliran Ringan) and Kelana Jaya Line (formerly known as PUTRA-Project Usahasama Transit Ringan Aliran Sdn Bhd) and 1.9 millions on the bus system, previously Intrakota and Cityliner. In addition, RapidKL provides services across 48 rail stations and 161 bus routes. RapidKL is a 100% government-owned company under the Ministry of Finance. Its operating agreement is conditional upon its ability to meet a set of key performance indicators monitored independently by the company (<http://www.myrapid.com.my/>). Today, RapidKL operates 165 bus routes within the Klang Valley which consist of 10 City Bus routes, 85 Local Bus routes, 63 Trunk Bus routes and 3 Express Bus routes. It currently has 11 bus depots spreading across the Klang Valley with 908 buses in operation. Every day, RapidKL transports over 140,000 passengers (<http://www.myrapid.com.my/>).

To continuously encourage the use of public transport and to provide services to the general public, RapidKL is also studying new bus routes with the arrival of more new buses. The company is also evaluating all bus routes in the Klang Valley inclusive of all areas without public transport. In line with the Government goal to increase the modal share of public transport in the Klang Valley from 10% to 25% by 2012, efforts have been stepped up to make public rail and bus services more attractive and accessible for all commuters (Ong, 2009). There are six (6) areas in the Klang Valley that is covered by RapidKL (Table 1). However, this study only focuses

on the services in Area One which is Kuala Lumpur City Centre (Central Business District) as it is the most popular public transportation in the city. In addition, there are numerous problems plaguing the passengers such as long waiting time (Service Frequency), overcrowding (Capacity), poor safety standard and poor government condition of the Bus (Technical Failure) and also system failures.

Table 1: The Klang Valley's six (6) areas

Area One	Kuala Lumpur City Centre (Central Business District)
Area Two	Kepong, Segambut, Selayang, Batu Caves, Gombak, Jalan Ipoh & Sentul
Area Three	Setapak, Wangsa Maju, UluKlang, Setiawangsa, Keramat, Ampang& Pandan
Area Four	Cheras, Kajang, Ulu Langat, Putrajaya, Cyberjaya, Semenyih, Sungai Besi, Seri Kembangan, Serdang&Balakong
Area Five	Klang, Shah Alam Selatan, Bandar Sunway, Subang Jaya, JalanKlang Lama &Puchong
Area Six	Shah Alam Utara, Subang, Damansara, Petaling Jaya Utara, Bangsar& Kota Damansara

Source: <http://www.myrapid.com.my/>

3. Customer Satisfaction Models

Customer satisfaction is defined in this study as the degree to which there is a match between the customer's expectations of the product and the actual performance of the products. Expectations are formed based on the information consumers receive from salespersons, friends, family, opinion leaders as well as their past experience. This is an important measure of the ability of a firm to successfully meet the needs of its customers.

Meanwhile, satisfaction is defined as an emotional post-consumption response that may occur as the result of comparing expected and actual performance (disconfirmation), or it can be an outcome that occurs without comparing expectations (Oliver, 1996). Customer satisfaction is the key factor that determines how successful the organization will be in customer relationships (Reichheld, 1996). The satisfaction of consumers lays the foundation for a company's long-term success. In addition, total quality management (TQM) is based on the idea of customer satisfaction – a management approach of an organization centered on quality, based on the participation of all its members.

The significance of the satisfaction rating is that customer satisfaction measures are an indicator of future profit (Hauser et al., 1994). Customers who are satisfied with a purchased product or service will buy the same product again, more often (Reichheld, 1996), and will also recommend it to others (Oliver and Swan, 1989). The American Customer Satisfaction Index (ACSI) depicts three antecedents of customer satisfaction (perceived value, perceived quality and customer expectations), and two consequences (customer complaints and customer

loyalty) (Fornell et al., 1996). The model shows that, perceived quality, customer expectation and perceived value influence customer’s satisfaction. Andreassen (1995) developed an extended model of customer dissatisfaction consists of five antecedents affecting the overall satisfaction. These are customer preference, service category differences, expectations, perceived service quality, and disconfirmation. Fecikova (2004) indicated that there is a strong relationship between quality of product (as an antecedent), customer satisfaction, and profitability (as a consequence). Figure 1 shows the model that depicts the relationship between the three elements. The following sections discuss some of the main items in customer satisfaction models.

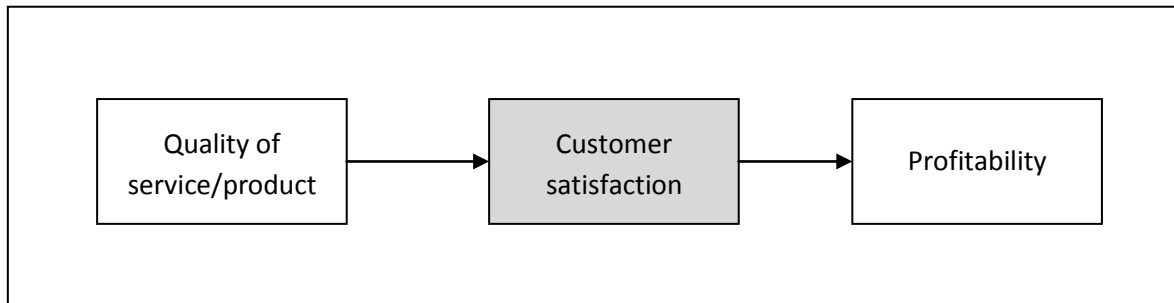


Figure 1: Dependence between Quality, Satisfaction and Profitability Ingrid (Fecikova, 2004, p. 58)

4. Research Framework

A theoretical framework has been developed to explain the interrelationship among the variables that contribute to the problem stated. This framework is formulated based on the customer’s satisfaction on public transportation services to define relationship among variables. Three (3) independent variables (IV) and one (1) dependent variable (DV) have been chosen in this study. Dependent variable is a customer’s satisfaction; meanwhile independent variables are expectation, perceived service quality and disconfirmation (Andreassen, 1995). The theoretical framework can be projected as in Figure 2.

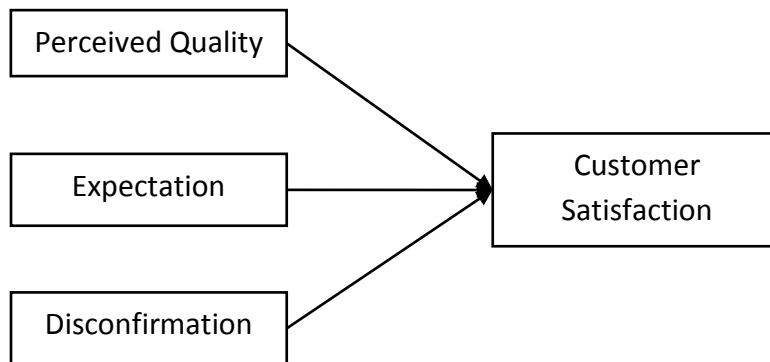


Figure 2: Research Framework adapted from Andreassen (1995)

4.1 Perceived quality

The degree in which the reliable product and services is delivered to customers and meeting their requirement is defined as perceived quality (NQRC, 1995). Meanwhile, Zeithaml (1988, p. 3) adopted the definition of service quality as “the consumer’s judgment about a product’s overall excellence or superiority”. According to Juran (1988) quality consists of two primary elements: product or service to meet the needs of the consumers and product or service is free from deficiencies. Therefore, as one of the bus service providers, RapidKL needs to be concern on these two elements by analyzing whether the service meets customers’ needs and to stay away from deficiencies in providing the service because the mismatch or deficiencies leads to dissatisfaction. Perceived quality also is simply a match between what customers expect and what they experience. Any mismatch between these two is a quality gap. Perceived quality is judgment by the customer, whatever the customer thinks is the reality. However, customer service’s word of mouth, past personal experiences, advertising and promotion, all mediate the acceptability of the offering, by influencing customer’s expectation. In fact, quality is perceived as whatever the customer says it is (Parasuraman et al., 1985)

The difference between consumer’s expectations and Rapid KL management perceptions of consumer’s expectations is a huge problem in providing the best quality service. The difference between service quality specifications and the service actually delivered by Rapid KL is another problem because the mismatch of service quality specification and the actual performance also leads to customers’ dissatisfaction. As stated previously, the performance of the provider suffers from some problems such as the long waiting time, overcrowding, poor service and condition of the bus. Customer satisfaction is the current overall satisfaction of the products and services offer to them. (Johnson & Fornell, 1991). This satisfaction is positively affected across the categories of product and services. (Fornell, 1992; Fornell et al., 1996). The customer assesses value fulfillment in terms of needs match and the risk of delivery. Consequently, for services compared with a product, typically a greater proportion of the perceived value hinges on the uncertainty the customer discerns in the delivery and fulfillment of customer’s expectations. Removing or at least reducing delivery or performance uncertainty is integral to garnering the sale. Repeat and growing business depend on Pre-sale which, customer’s acceptance of expectation of surety of needs fulfillment and Post-sale which, service delivery in a fashion that fulfils customer’s expectations.

According to Bruhn and Grund (2000), the major outcome for customer’s satisfaction is customer loyalty. It means that companies can have bigger share of loyal customer profit by increasing repurchase rates, greater cross-buying potential, higher price-willingness, positive recommendation behavior and lower switching tendency. Customer’s satisfaction as discussed above leads to profitability and service quality is the main factor of it, especially in public transport service (Fecikova, 2004). Therefore, it is clear that service quality indirectly affects the passenger’s benefits

4.2 Customers' expectation

The customer's expectations represent both the served market's prior consumption experience with the firm's offering, including non-experiential information available through sources such as advertising and word-of-mouth, and a forecast of the supplier's ability to deliver quality in the future. Thus, service is never a what; it is always how the performance is done by service provider. Human experience is a bit dicey. It's made up of a bunch of sensory impressions mixed with current moods and intentions and altered by a unique personal history. And recent research has shown that a substantial portion of human experience is governed by elements of thought we are not even conscious of. So good, bad, great, or terrible service only exists in the customer's own experience.

Passengers of RapidKL bus service experience the service everyday and they know how to measure and judge the performance. Overcrowding, long waiting time, condition of the vehicles and system failure are the most terrible experiences faced by the passengers. These will lead to dissatisfaction. In other words, when the performance does not match the passengers' expectation, the customers are frustrated and this will lead to dissatisfaction.

In the case of this study, the RapidKL bus service needs to be concern on customer's expectation on the service and make the right decision or action. Mostly, passengers expect the bus will be frequently available for them and no long time waiting (speed) the bus. They want the bus service to be available as frequently as possible as it's the main role to meet the customers' (passengers) expectation.

4.3 Disconfirmation

Oliver (1980), proposed that satisfaction is a function of the disconfirmation of performance from expectation. Feelings of satisfaction arise when consumers compare their perceptions of a product's performance to their expectations. Confirmation results when the actual performance matches initial expectations. The customer is satisfied if the perceived performance exceeds a consumer's expectations (a positive disconfirmation) then the consumer is satisfied. But if perceived performance falls short of his or her expectations (a negative disconfirmation), then the consumer is dissatisfied. Based on Figure 2, the mismatch between customer's expectation and performance is interpreted as negative disconfirmation because the performance is below than the customer's expectation. There are two possible responses by the organization to such situation. The first is the organization needs to explore reasons why perceived performance is low. This is caused by the actual performance which was low generally or perceptions have been influenced by negative experience in one aspect of the performance, in other words, past negative experience faced by the customer. The second response is to check whether the customer's expectation has been properly "managed". The organization needs to explore whether the customer gains an expectation which is out of line with the company's ability to perform.

RapidKL performance is below than what passengers expect and this leads to negative disconfirmation. The negative experience faced by passengers is a negative disconfirmation which leads to dissatisfaction. Decision research suggests that positive and negative disconfirmations should weigh very differently on satisfaction. Losses are perceptually greater than gains of equal amount (Kahneman & Tversky, 1979). In line prospect theory with (Kahneman & Tversky, 1979, and Andreassen and Lindestad, 1998] , report results suggesting that negative disconfirmation has more impact on satisfaction than positive disconfirmation at the micro-level. Fornell and Wernerfelt (1987) and Andreassen (1995) define dissatisfaction as the state of affective or cognitive discomfort that caused by insufficient returns in relation to the available resources used by the consumer during the consumption or purchase process.

5. Research Methodology

5.1 Research design

Research design is a framework or blueprint for conducting a marketing research project (Malhotra, 1993). Specifically, it is the plan to be followed to answer the research objectives. An appropriate research design is required in order to gain precise information to answer the objective of the research. A descriptive study is used to ascertain and to be able to describe the characteristics of variables in a situation. This study is undertaken to identify characteristics or description on the variables affecting a problem situation. The passengers were asked of their opinion and what they felt about the service. The descriptive research is followed by conclusive research that is specific on causal research. The reason to use causal research is to obtain evidence on cause-and effect (causal) relationship. It is investigated whether one variable causes or determines the value of another variable.

Besides the mode choice attributes, social-demographic characteristics of each respondent was also examined using Revealed Preference (RP) survey. These characteristics include gender, age, income, and occupation, level of education, frequently usage and purpose of travel (Blow, 2006). Based on the literature review; this research concentrates on conceptual framework of consumer's satisfaction. This framework emphasizes those variables like Perceived Quality, Customer's Expectations, Disconfirmation and these independent variables are positively related to the consumers' perception to specific purchasing of particular services. The section to follow demonstrates the research hypotheses extracted from the theoretical model.

Research Hypotheses:

H1 = perceived quality is related to customer's satisfaction

H2 = customer's expectation has significant relationship with customer's satisfaction

H3 = disconfirmation and customer's satisfaction have significant relationship.

5.2 Sampling design

The study adopts a sample of people who live in Kuala Lumpur City Centre (Central Business District) area that mostly use RapidKL bus, from 6.00am to 11.00pm. The questionnaires are distributed to generate data for this study. The sampling frames for the research are the respondent who live and work in the area and use RapidKL bus services. Two hundred (200) respondents are selected in this study.

5.3 Design of the questionnaire

Structured questions are being chosen by presenting a fixed set of response alternatives to respondents in the form of closed-ended questions using Likert-type scale. The study uses Structured questions because it is easy for respondents to answer the questions. The coding and analyzing of data are much simpler and hence less costly. The likert type scale ranges from five scales, one to five (1-5), which is 1- strongly disagree, 2 – disagree, 3- undecided, 4- agree and 5- strongly agree. The questionnaires adopted by researchers consist of two sections: section 1 and section 2. Section 1 consists of section A which is the analysis on respondents' profile and background. Meanwhile, section 2 consists of section B and C. Section B is the analysis of perceived quality, customer's expectations and disconfirmation of the service. Meanwhile, section C is the analysis of customer's satisfaction.

5.4 Data collection

For this research, primary data has been selected as the first method in data collection. The specific purpose of addressing the problem in hand has been addressed. However, this method requires much time, energy and cost. The data has been gathered by meeting customers, talking to consumers, observing them, and seeking their responses through questionnaires. The researcher plan to distribute the questionnaires which will be filled up by the respondents to get new data.

5.5 Pilot study

Before the survey is carried out in full scale, the researcher has conducted a pilot study by distributing the research instruments to thirty (30) selected respondents in Kuala Lumpur, Malaysia. The purpose of the pilot study was to find out whether the respondents understand the statements and questions in the instruments. Minor adjustments have been made to the instruments after the pilot study.

5.6 Method of analysis

For the purpose of this study, frequency distribution method will be used for data analysis process. In data analysis method, the researcher will use frequency distribution by using Statistical Package for Social Science (SPSS) software. The data will be coded, computed and finally processed using the SPSS software. The methods of data analyses include:

- Frequencies Analysis
- Correlation Analysis
- Regressions Analysis

SPSS is used to count the number of respondents associated with different values of the variables and to express it in a percentage term. Frequencies analysis is used to interpret the respondents' profile and background. All the tables and pie charts below show the analyses of the respondents' profile and background (Section A) based on two hundred (200) respondents. The demographic information used includes race, gender, marital status, age, education level, occupation, income, frequency and purpose of travel.

The first method used in this study is frequency distribution, which one variable is considered at a time. The main purpose is to count the number of responses associated with different value of the variable. The relative occurrence, or frequency, of different values of the variable is expressed in percentages.

6. Results

The demographic information below represents the respondents in Kuala Lumpur City Centre (Central Business District). The age range of respondents shows that majority of the respondents are between 21 – 30 years old with 56%, while 20% are between 31- 40 years old, and the other are from different ranges of ages. The analysis shows that majority of the Rapid KL bus service customers are between 21 – 40 years old.

Table 3: Demographic information of RapidKL Respondents

Variable Name/Description		Frequency	Percent (%)
Gender	Female	88	44.0
	Male	112	56.0
Age	Below 20 years	8	4.0
	21 – 30 years	112	56.0
	31 – 40 years	41	20.50
	41 – 50 years	37	18.50
	Over 50 years	2	1.0
Education Level	High school or less	124	62.0
	Diploma	42	21.0
	First Degree	18	9.0
	Postgraduate	16	8.0
Marital Status	Single	138	69.0
	Married	60	30.0
	Others	2	1.0
Occupation	Private	168	84.0
	Government	21	10.50
	Self Employed	6	3.0

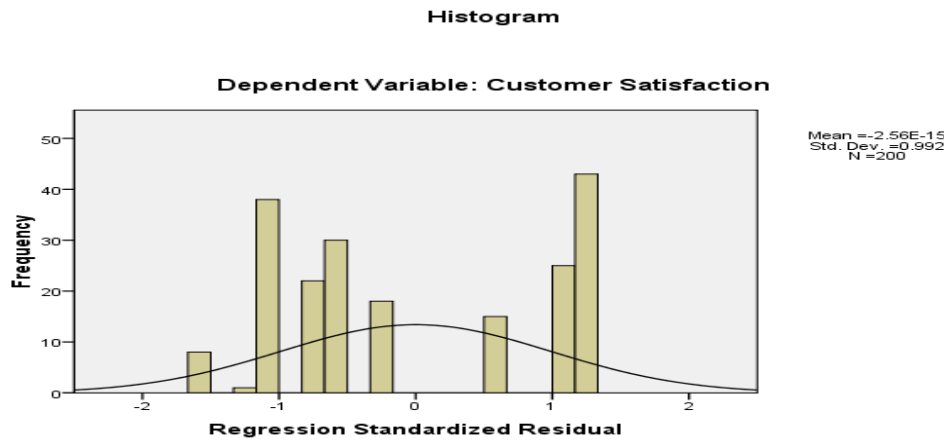
	Others	5	2.5
Monthly Income	Under RM500	42	21.0
	RM501 to RM1000	56	28.0
	RM1001 to 1500	61	30.5
	RM1501 to 2000	28	14.0
	Over 2001	13	6.5
Frequently Usage	Never	5	2.5
	Once a day	15	7.5
	Twice a day	128	64.0
	Three times a day	32	16.0
	More than three times a day	20	10.0
Purpose of travel	To work place	73	36.5
	To school/college/university	57	28.5
	To market	11	5.5
	Others	59	29.5

Table 3 above shows that fifty six percent (56%) of the respondents are females and forty four percent (44%) are males. Gender analysis shows that majority of the users mostly use of this services are females rather than males. Males usually have their own motorcycles. Based on education, it shows that sixty two percent (62%) of the respondents are from high school level or less, while twenty one percent (21%) from diploma level and followed by nine percent (9%) with first degree and eight percent (8%) from postgraduate's student's level. For marital status, it shows that sixty nine percent (69%) of the respondents are single, followed by thirty percent (30%) married and one percent (1%) others. Perhaps, the single respondents are trying to keep their budget as a priority by choosing public transportation services every day as it saves cost.

Based on the information about occupations above, 83% of them are working in the private sectors while 11% of the respondents are working in the government sector, followed by 3.5% are self-employed and 2.5% others. This analysis shows that majority of the respondents are working with the private sectors.

The table above also shows that 30.5% of the respondents have income from RM1001 to RM 1500 followed by 28% respondents with their income between RM501 to RM1000, while 21% of the respondents' income is under RM500, 14% of the respondent's income between RM1501 to RM2000 and 6.5% income over RM2001. Analysis shows that most of the respondents' incomes are from RM 1,001 to RM1500. For respondent frequently usage, it shows that 64% of the respondents use the service twice a day while 16% use it three times a day. 10% of the respondents use the bus services more than three times a day whereas 7.5% use the service once a day and 2.5% never use the service provided by rapidKL. Thus, most of the respondents use the services twice in a day.

The results also show the purpose of travel by respondents. 34.49% of the respondents use the bus service to go to workplace while 26.15% use it to go to school/college/university every day. 27.06% of the respondents use the service to go to the market daily. This analysis shows that majority of the respondents use bus to work place because it is cost saving.



The Figure above has been drawn to show the result of regression analysis based on Table 2.

The Anova (Table 4) reflects the analysis of variance that tests whether the model is significantly better at predicting the outcome than using mean as the best request. The Model has 45 degree of freedom. If the improvement due to fitting the regression model is much greater than accuracy within the model, then the value of F will be greater than 1.2; in our proposed model the F value is 191.351 which is significant as p is less than 0.001.

Table 4: ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.891	3	10.630	191.351	.000a
	Residual	10.889	196	.056		
	Total	42.780	199			

a. Predictors: (Constant), Disconfirmation, Perceived Quality, Customer Expectation

b. Dependent Variable: Customer's Satisfaction

* Y (customer's satisfaction) = $b_0 + b_1 X_1$ (perceived quality) + $b_2 X_2$ (customer's expectation) + $b_3 X_3$ (disconfirmation)

$$Y (CS) = -0.464 + (.094) (PQ) + (.684) (CE) + (.101) (DC)$$

From the Coefficients Table 5, the Standardized Beta Coefficients give a measure of the contribution of each variable to the Model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Significant (p) values give a rough indication of the impact of each predictor variable- a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. If the correlation with other variables is high, it is suggesting the possibility of multicollinearity.

Table 5: Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.978	.119		24.989	.000
Perceived Quality	.060	.053	.094	1.147	.253
Customer's Expectation	.337	.049	.684	6.905	.000
Disconfirmation	.042	.041	.101	1.023	.307

a. Dependent Variable: Customer's Satisfaction

From Table 6 and Table 7 the independent variables show at least some relationship with the dependent variable. The result of the table labeled Coefficient. Two values are given: Tolerance and VIF. Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the Model and is calculated using formula $1 - R^2$ for each variable. If this value is very small (less than 0.10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity.

Table 6: Descriptive Statistics

	Mean	Std. Deviation	N
Customer Satisfaction	4.69	.464	200
Perceived Quality	4.00	.726	200
Customer Expectation	3.96	.942	200
Disconfirmation	3.24	1.117	200

The data in Table 6 above shows that the average of customer's satisfaction is 4.69. It is known from this result that more passengers like using the bus service every day. For the sake of presenting the central tendencies, two descriptive statistics have been used: the mean and net to evaluation. The net to value has been defined as a difference between the percent points of persons giving positive evaluations and those giving negative ones.

For both descriptive statistics, an integrated indicator has been created; it is built on the basis of the values of all aspects. It indicates a global central tendency, allowing estimating the overall level of satisfaction with the functioning of the public transport service.

Table 7: Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.87	5.17	4.69	.400	200
Residual	-.355	.308	.000	.234	200
Std. Predicted Value	-2.037	1.206	.000	1.000	200
Std. Residual	-1.508	1.307	.000	.992	200

a. Dependent Variable: Customer Satisfaction

The other value given is the VIF (Variance inflation factor), which is just the inverse of the tolerance value (1 divided by tolerance). VIF values above 10 would be a concern here, indicating multicollinearity. In this research the tolerance value for all the independent variables is within 0.571 to 0.629 which is not even less than .10, therefore, there is no violation in the multicollinearity assumption. This is also supported by the VIF values which are less than 10.

The next thing is which of the variables included in the Model contributes to the prediction of the dependent variable. Ignoring any negative signs out it is found that the largest beta coefficient is 0.684, which is for customer's expectation. This means that this variable makes a significant or unique contribution to explaining the dependent variable, when the variance explained by all other variables in the Model is controlled for. The beta values for perceived quality and customers' expectation are accordingly, 0.094, 0.101 indicating that these made less of a contribution.

The next part we will discuss is the parameters. We all know that in multiple regressions the Model takes in the form of equation. The equation from the SPSS output gives us the estimates of b - values and these values indicate the individual contribution of each predictor of the Model. If value b is to be replaced into equation then the Model can be defined in the form of equation. Customer satisfaction (Y) = b0 + b1 X1 (perceived quality) + b2 X2(customers expectation) + b3 X3 (disconfirmation).

So if we put the values into the equation it will be;

$$\text{Customer satisfaction (Y)} = -0.464 + (.094) (\text{perceived quality}) + (.684) (\text{customers expectation}) + (.101) (\text{disconfirmation}).$$

7. Conclusions and recommendations

For public bus transport to remain sustainable, they should increase the level of customer's satisfaction. Efficient public bus transport will be able to attract new customers, not only keep customers to continue use to fulfill their travel demand but also to attract potential customers. The functional factor has a strong influence on customer's satisfaction and attention to improve customer's satisfaction. Frequency, price, punctuality and travel time are the crucial factors responsible in bringing higher level of satisfaction.

This study answers hypotheses that perceived quality is not related to customer's satisfaction by identifying that customer's satisfaction dimensions serve as points of departure for companies to develop action plans and strategies that generate perceptions of quality by customers. Thus, for each type of satisfaction there may be a specific set of different dimensions of quality, in that they assume different orders of priority. Additionally, there is yet another possibility that each organization may have dimensions that are specific to each/its sector. The classification of the service quality dimensions is important because each one brings different approaches, which helps the managers of the companies in providing services to understand the importance of each dimension and their impact on customer's satisfaction. The empirical data of this case indicates that reliability, safety, speed, comfort and punctuality are the dimensions of service quality which the organization believes most influence the perceived quality. This study also clarifies and thus, contributes to the key dimensions of service quality that influence the perceived quality service, in a specific means of public transportation.

It is concluded that in the case of customers, there may be some oscillation in the levels of satisfaction (very satisfied, satisfied, unsatisfied) within the zone of tolerance. Non-customers are less tolerant. In these discussion groups, several situations or scenarios of dissatisfaction might emerge that would cause in the abandoning of the service, including failure to comply with the vehicle schedules, frequency of carriages and disabled access to the stations. In answering RQ2, customers expect the service provides more advantage for them. Furthermore, this study shows that if the dimensions of service quality are assured, then the customers achieve a degree of expectation, having no significant relationship with customer's satisfaction in accordance with their needs, answering RQ3.

The effort in this research is dedicated to develop an attractive and marketable public transport. The RapidKL bus transport authority should start paying attention to the voice of customer to offer better public bus transport, otherwise disappointed existing customer will turn their choice into private motorize. The study should be conducted annually to evaluate public bus transport performance and create some corrective improvement to satisfy the customer.

The results show that a functional factor is most important in the Klang Valley. Frequency is pointed out due to limited number of supply that could not fulfill the high number of travel demands. Travel time is pointed out due to certain number of capacity fulfillment in public bus

transport, bringing longer travel time. Price is also pointed out because customers do not experience better value that they pay for Rapid KL bus service. This three related service quality has to be improved to keep existing customers and attract more customers. The service providers have to improve service quality in the RapidKL bus service in line with satisfaction among users. The service attributes could be improved as single attribute or as the factor. The functional factor has a strong influence on customer's satisfaction. The RapidKL decision-maker and provider could start paying attention to increase RapidKL bus service supply due to the high number of travel demands especially during peak hours, shorter travel time of public bus transport by giving special line in order to avoid highly congested road, and giving more value to the price that customers pay for their public bus transport service.

In order to increase customers' satisfactions, one of the important strategies is to [determine](#) the factors that influence the customers' satisfaction towards RapidKL bus service. These factors are perceived quality, expectation and disconfirmation. In this study, the focus is on Kuala Lumpur City Centre (Central Business District) as the main area as it's complementary to bus terminal station. Based on the findings, customer's expectation is one of the most important determinant of customers' satisfaction towards the RapidKL bus service. The 15-minute frequency is not the actual performance by the RapidKL bus service. The frequency is not consistent and sometimes passengers are made to wait for the bus for up to one hour. This problem leads to the feeling of dissatisfaction among many passengers. RapidKL should meet the 15-minute frequency for passengers' convenience besides increasing the frequency to 10 minutes during peak time periods, i.e. from 6 am to 9 am and 5 pm to 11 pm. And the frequency factor should be taken seriously as many grouses from the customers are related to this problem. One of the strategies and recommendations that can be proposed based on the result of the study on RapidKL bus is for the buses to have their own "tracks" in an effort to smoothen the ride. Many commuters are discouraged from using the public buses due to their slow movement. If this problem is solved, half of the battle is already won. In places like Curitiba, Brazil and Jakarta, Indonesia, modern bus lanes have resulted in the success of public bus transport.

Subsequently, when service quality is analyzed at an attribute level, it is revealed that security on board is of paramount importance to the passengers. Therefore, a serious effort has to be made to increase the quality of on board security. Some of the possibilities are; to increase the number of security personnel, to ensure all exit/entrance doors are closed during operating time and to install an up-to-date surveillance tools. In a nutshell, safe and comfortable bus service is a basic rights of the commuters. In this instance, the RapidKL buses should be in good condition and clean at all times. This will definitely increase the customers' satisfaction and RapidKL will be able to successfully maintain the current customers as well as attract the new ones.

References

Andreassen, T. W. (1995). (Dis) satisfaction with public services: the case of public transportation. *Journal of Services Marketing*, 9(5), 30-41.

- Blow, L., Browning, M., and Crawford, I. (2006). retrieved on the 23 April 2013, www.economics.ox.ac.uk/research/wp/pdf/paper282.pdf
- Bruhn, M. & Grund, M.A. (2000). Theory, development and implementation of national customer satisfaction indices: the Swiss Index of Customer Satisfaction (SWICS). *Total Quality Management*, Vol. 11 No. 7, pp. 1017-28.
- CHKL (City Hall Kuala Lumpur). Kuala Lumpur structure plan 2020. Retrieved on March 2007, from <http://www.dbkl.gov.my/pskl2020/english/index.htm>
- Fecikova, I. (2004). An index method for measurement of customer satisfaction. *The TQM Magazine*, 16(1), 57-66.
- Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience. *Journal of Marketing*, 56(1), 6-21.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American customer satisfaction index: nature, purpose, and findings. *Journal of Marketing*, 60(4), 7-18.
- Fornell, C., & Wernerfelt, B. (1988). A Model for Customer Complaint Management. *Marketing Science*, 7(3).
- Fornell, C. (1992). A national customer satisfactin barometer: The Swedish experience. *Journal of Marketing*, 56, 6-21.
- Fornell, C., Johnson, M.C., Anderson, E.W., Cha, J. and Bryant, B.E. (1996, Oktober). The American Consumer Satisfaction Index: nature, purpose and findings. *Journal of Marketing*, Vol. 60, 7-18.
- Hauser, J. R., Simester, D. I., & Wernerfelt, B. (1994). Customer satisfaction incentives. *Marketing Science*, 13(4), 327-350.
- Johnson, M. D., & Fornell, C. (1991). A framework for comparing customer satisfaction across individuals and product categories. *Journal of Economic Psychology*, 12(2), 267-286.
- Juran, J. M. (1988). *Juran's quality control handbook*: New York: McGraw-Hill.
- Juran, J., *Juran on Planning for Quality*. (1988). New York: Free Press.
- Keat, O.T. (2009). Public Transport. Retrieved on 23 of April 2013, transitmy.files.wordpress.com/.../pemandu-lab-highlights-upt.
- Malhotra, N.K. (1993). *Marketing Research: An Applied Orientation* (3rd Ed) New Jersey, United States of America: Prentice Hall International Inc
- NQRC (1995). *American Consumer Satisfaction Index Methodology Report*, University of Michigan Business School, Ann Arbor, MI.
- Oliver, R. L., & Swan, J. E. (1989). Consumer Perceptions of Interpersonal Equity and Satisfaction in Transactions: A Field Survey Approach. *Journal of Marketing*, 53(2), 21-35.
- Oliver, R. (1980). A Cognitive Model Of Antecedents And Consequence Of Satisfaction Decisions. *Journal of Marketing Research*, 17 (4), 460-469.
- Oliver, R. (1996). *Satisfaction: A Behavioral Perspective on the Consumer*, (4th Ed) Boston: McGraw Hill College.

- Parasuraman, A. Zeithaml, V., & Berry L. (1985). A Conceptual Model of Service Quality and its Implication for Future Research. *Journal of Marketing*, Vol. 49, 41-50.
- Reichheld, F. (1996). *The Loyalty Effect*, Harvard Business School Press, Boston
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of Marketing*, 52(3), 2-22.
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