# Measuring Parcel Service Quality in University using Servqual Model

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Abstract- Service quality (SERVQUAL MODEL) is among the most crucial determinant for customer satisfaction in the parcel service industry. It consists of tangibility, reliability, assurance, empathy and responsiveness. This model greatly affects customer satisfaction. The purpose of the research is to examine the effects of the factors of SERVOUAL MODEL towards customer satisfaction in University Malavsia Kelantan (UMK) City Campus students in the case of HEP Parcel Service Quality. A structured questionnaire was developed to be answered by 246 students in UMK City Campus. All factors of SERVQUAL toward the HEP parcel service have the association with the satisfaction of UMK students and it has proven in the results. Research have recommend University Malaysia Kelantan (UMK) to further improve their HEP Parcel Service Quality and pay higher attention towards it to increase student usage and satisfaction.

**Keywords:** Student Satisfaction, SERVQUAL MODEL, HEP Parcel Service Quality, University Malaysia Kelantan (UMK)

## 1. Introduction

Nowadays, logistics practitioners and academics are awareness that customer service is becoming important in the industry [9]. One of the service sectors is parcel service and it has estimated to reach USD 500 billion in 2008 and continue to develop in future [10]. Thus, parcel service provider need to improve their service to sustain the competitive advantages and increase customer satisfaction. However, that is less information available about the customer satisfaction with the parcel service [11]. Therefore, purpose of the research is to identify the effects of SERVQUAL MODEL towards satisfaction of University Malaysia Kelantan (UMK) City Campus students in the case of HEP Parcel Service Quality. There have some problem faced by the customer from the parcel service such as lost mail, late delivery, parcel damaged and so on. It can category as the mismanagement. When who is relies on the parcel service to their suppliers and consumer, missing mail and late delivery will cause their image dropped and profit loss (Froehlich, 1978). The Customer satisfaction also directly affected. According to the [6], ability to manage

International Journal of Supply Chain Management IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print) Copyright © ExcelingTech Pub, UK (<u>http://excelingtech.co.uk/</u>) and collect customer information is a strategy to maintain competitive advantage. However, the parcel from the HEP only can take during office hours and there is no information by the HEP staff about whether the parcels have arrived and have been processed. Hence, mismanagement of the HEP parcel service faced by the UMK student in City Campus is affect the student satisfaction. The total amount of the student in the UMK City Campus is 4552 which is the student from the Faculty of Entrepreneurship and Faculty Hospitality, Tourism and Wellness. Based on the information of HEP UMK City Campus, 85% of the students in UMK City Campus use the parcel service. Thus, the population of the UMK students use the HEP parcel service is 3869. A structured questionnaire was developed to be answered by 246 students in UMK City Campus.

## 2. Objective

The specific objectives of this research are:

• To identify the association between the reliability of HEP parcel service quality and students satisfaction in UMK City Campus.

• To analyze the relationship between the responsiveness of HEP parcel service quality and students satisfaction in UMK City Campus.

• To identify the association between the tangible of HEP parcel service quality and students satisfaction in UMK City Campus.

• To determine the relationship between the assurance of HEP parcel service quality and students satisfaction in UMK City Campus.

# 3. Literature Review

A company products or services are related to the level of customer satisfaction because it can represent long term competitiveness and the success of the company [5]. Thus, service quality has a strong consequence to the customer satisfaction. According to [3], service quality can be compared by customers between service expectation and the actual service which becomes the only specific definition for

service and thus service is evaluated by how good the service given to achieve customer expectation.

Meanwhile, the dimension of assurance is the aspect to address the customer's perceived privacy and security [8]. The extent of this dimension is to evaluate the courtesy and knowledge of employees and their skill to motivate customers confident and trust [7].

Reliability is defined as the ability of the service provider to perform promised services precisely and dependability [13]. According to [1], reliability dimension is explained about the relationship between time and service such as delivery on time to the customers, promising time delivery solving customer problems, delivery damage-free goods and doing right at the first time.

The last dimension for the service quality in the SERVQUAL is responsiveness dimension. It is measured by the speed of feedback such as provided prompt service and willingness to help customer with minimal waiting and queuing time [13]. Customer is expect the personnel address them in a timely manner and understand their needs and wants [14].

The figure 1. shown in below is represented the theoretical framework of SERVQUAL Model that is adopted in the research. There have 4 dimension which are tangible, assurance, reliability and responsiveness as the independent variables while the dependent variable is the UMK students' satisfaction toward HEP parcel service in UMK City Campus.



Figure 1: Theoretical framework

#### 4. Methodology

The researchers used quantitative method to collect the information about the student satisfaction in UMK City Campus toward HEP parcel service. The target population for the research is the students from UMK City Campus in the Kelantan. The students of participated in the research have the experience to use the HEP Parcel service. Besides that, the researcher will refer the step in the research process flow.

Based on the Figure 2. below, it shows about the flow of research process. The study will start by identify the problem of the research and problem will review through the journal that have been done by the other person it known as the literature review. Through literature review if it is significant to the research problem it can be continue to data collection, if not significant need to restudy the research problem. After the data collection, research will process to the next stages which are questionnaire survey and observation. The final process of the research will be analysis and discuss the data.



Figure 2: Research Process Flow

The total amount of the student in the UMK City Campus is 4552. Based on the information of HEP UMK City Campus, 85% of the students in UMK City Campus use the HEP parcel service. Thus, the population of the UMK students use the HEP parcel service is 3869. Based on the rule of thumb, the sample size of the research is 246 because the appropriate sample size is at least 30 and below 500. According to Roscoe (1975), 50 cases being very poor, 100 are poor, 150 is fair, 300 is good, 500 is very good, and 1000 or more is excellent. Convenience sampling is chosen in conducting the research as it suitable to the respondents who has the similarity characteristics and conveniently available to provide it. The data collect though the survey questionnaire. A structured questionnaire was developed to be answered by 246 students in UMK City Campus. Thus, 246 questionnaire is adapted in the research and two types of question are used which are multiply choice and five point Likert-Scale.

Data collected is analyzed by the Statistical Package for Social Science (SPSS) because it can facilitate to achieve our objective. The research used frequency analysis, reliability analysis, descriptive statistics and Pearson's correlation coefficient to analyze the data. Before start to distribute questionnaire to the 246 UMK students, the research has done the 30 pilot test to test the reliability by using the Cronbach's Alpha techniques and finally the results of all the variables are acceptable. Thus, through the results of pilot test, there is no variables need to remove.

Through this method, 250 questionnaires were distributed to the UMK student in City Campus. The 246 usable questionnaires are obtained. Thus, the response rate is 98.4%. The 246 respondents for the research are comprised of 58.5% female and 41.5% male. The respondents come from year 1, year 2, year 3 and year 4 students. There have only 40 respondents (16.30%) from year 1 answered the questionnaire. Out of 78 respondents (31.7%) and 76 respondents (30.9%) are from year 3 and year 4 respectively. The less is from year 2. The respondents in this study are divided into 8 courses which consists SAL, SAK. SAH, SAB, SAR, SAW, SAP, and SAE. Majority, the respondents from SAL course are 22.8% respondents. Follow up by SAP (15.9%), SAH (13.8%) and SAR (13.0%) respectively. Course of SAK and SAB are same frequency which are 26 (10.6%). There have 25 respondents (10.2%) from SAW course. The least respondents in this research are from SAE course which is 3.3%.

## 5. Findings and Analysis

### 5.1. Reliability Analysis

Table 5.1 has shown that the Reliability statistics which used 30 pilot tests to prove the reliability of the research. The reliability analysis is used Cronbach's Alpha to determine the reliability of the questionnaire and the result was found to be 0.921. Thus, the results of all the variables are acceptable and the variables used in the research are valid and highly reliable. 
 Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.921	32

## 5.2 Descriptive Analysis

Descriptive analysis used to determine the average mean for each variables to identify whether the variables achieve the agree level of the mean by the respondent. Thus, mean and standard deviation is facilitated to found that the HEP Parcel Service quality students perceived. The agree level of the mean is above 3.51 is agree however lower than 2.50 shown that the respondent disagree the statement in the

variables. Table 4.2 has shown that the average mean for the independent variable as tangible (3.5237), assurance (3.8200), reliability (3.6452) and responsiveness (3.7596). For the dependent variable of student satisfaction the average mean is 3.6341. Thus, assurance with the highest mean is to be the most dominant dimension. On the other hand, tangible is perceived as the least dimension in the HEP parcel service. Thus, the average mean for all the independent variable and dependent variable are agree.

 Table 2: Descriptive statistics

	Mean	Std. Deviation	N
Tangible_Mean	3.5237	.63977	246
Assurance_Mean	3.8200	.50679	246
Reliability_Mean	3.6452	.55317	246
Responsiveness_Mean	3.7596	.56860	246
Satisfaction_Mean	3.6341	.59834	246

#### 5.3 Correlation Analysis

Correlation analysis is one of the techniques employ to examine the association between each variable. The dependent variable was UMK student satisfaction while the independent variables were tangible, assurance, reliability and responsiveness.

Based on the table 4.3 below, UMK students' satisfaction towards the tangible, assurance, reliability, and responsiveness of the HEP parcel service have a moderate positive correlation. Thus, the HEP parcel service quality have a significantly positively correlation to the UMK student satisfaction in City Campus. The correlation of the HEP service quality attribute to the UMK students' satisfaction for the tangible (r=0.448, p-value 0.000<0.01), assurance (r=0.512, p-value 0.000<0.01), reliability (r=0.562, p-value 0.000<0.01) and responsiveness (r=0.593, p-value 0.000<0.01). The Pearson correlation of 0.593 (p-value 0.000<0.01) implies that the responsiveness is the highest level of influence on UMK students' satisfaction. Thus, the hypothesis for all of the variables is accepted. The results show that the availability of HEP parcel service has the effects to influent the UMK students' satisfaction.

Table 3:	Pearson's	Correlation	Coefficient
Table 5.	realson s	Conclation	Coefficient

			Satisfaction_M
			ean
Tangible_Mean	Pearson Correlation		.448**
	Sig. tailed)	(2-	.000
	N		246
Assurance_Mean	Pearson Correlation		.512**
	Sig. tailed)	(2-	.000
	N		246
Reliability_Mean	Pearson Correlation		.562**
	Sig. tailed)	(2-	.000
	N		246
Responsiveness_Mean	Pearson Correlation		.593**
	Sig. tailed)	(2-	.000
	N		246
Satisfaction_Mean	Pearson Correlation		1
	Sig. tailed)	(2-	
	Ν		246

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

# 6. Conclusion

The aim of the research is to identify the effect in HEP service quality that contributes to the UMK students' satisfaction in the City Campus. Overall, the results from the research have endorsed previous research and the objective is achieved. The research is not a perfect study. There are several limitations. The researchers are adopted questionnaire survey which has some limitation to our research because the results of the study might suffer from the respondent bias. Besides that, other sampling method should be adopted by the future researcher because it can get more representative sample. The contribution of the research is to assess the higher influential HEP parcel service quality toward student satisfaction in UMK City Campus and fill the gaps of the previous study on the relationship between service quality and customer satisfaction in the Malaysia parcel service. However, unlike previous research this study only achieve moderate positive correlation so University Malaysia Kelantan can provide the training needed for their HEP staff in providing the better service quality to the student in each Campus (Ho, Teik, Tiffany, Kok, & Teh, 2012). Lastly, the further investigate of the customer satisfaction in parcel service should be conducted in the difference areas by future research (Panagiotis, L., 2014).

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