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**SERVICE QUALITY OF DOMESTIC WASTE COLLECTION  
SERVICES IN BATU DISTRICT, SELAYANG MUNICIPAL  
COUNCIL, SELANGOR: THE SERVQUAL APPROACH**



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**MASTER OF SCIENCE (MANAGEMENT)  
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AUGUST 2017**

**SERVICE QUALITY OF DOMESTIC WASTE COLLECTION SERVICES IN  
BATU DISTRICT, SELAYANG MUNICIPAL COUNCIL, SELANGOR: THE  
SERVQUAL APPROACH**



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**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
in Partial Fulfilment of the Requirement for the Master of Science (Management)**



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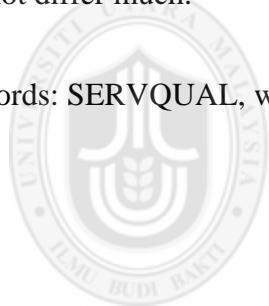
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## ABSTRACT

The aim of this study is to examine the differences between expectation of consumers of the domestic waste collection services and the actual perception of consumers after receiving the service from the appointed domestic waste collection services contractors in the study area. The SERVQUAL approach was adopted and adapted in this study. The SERVQUAL components are tangibility, reliability, responsiveness, assurance and empathy. The questionnaire was distributed to 400 residents in the Batu District of Selayang Municipal Council. Only 399 questionnaires were used because one incomplete questionnaire. Batu district was chosen because it is the most populated district in Selayang Municipal Council. The field data was later cleaned before the descriptive and paired T-test statistical analysis was conducted. The results showed that only assurance and empathy do have a difference before and after consumers received the services. As consumers do not get involved with the following process of handling domestic waste as other personal services such as a haircut, the expectation and perception of consumers does not differ much.

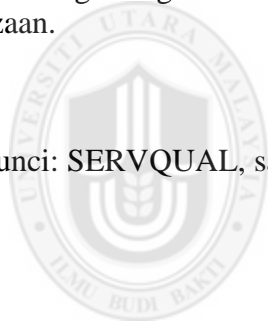
Keywords: SERVQUAL, waste, domestic waste



## ABSTRAK

Tujuan kajian ini adalah untuk mengkaji perbezaan di antara harapan pelanggan-pelanggan perkhidmatan pungutan sampah domestik dan persepsi sebenar pelanggan-pelanggan selepas menerima perkhidmatan-perkhidmatan dari kontraktor pungutan sampah dalam kawasan kajian. Pendekatan SERVQUAL digunakan dan diadaptasikan dalam kajian ini. Komponen SERVQUAL adalah keberanian, kebolehpercayaan, responsif, jaminan dan empati. Soalselidik diagihkan kepada 400 penduduk di daerah Batu, Majlis Daerah Selayang. Hanya 399 soalselidik yang digunakan kerana satu soalselidik tidak lengkap. Daerah Batu dipilih kerana ianya adalah daerah yang kepadatan penduduk yang tinggi dalam Majlis Daerah Selayang. Data lapangan dibersihkan sebelum analisis statistik diskriptif dan ujian-T berpasangan dijalankan.. Keputusan menunjukkan hanya jaminan dan empati wujud perbezaan sebelum dan selepas pelanggan menerima servis tersebut. Oleh kerana pelanggan tidak terlibat dalam proses menguruskan sampah domestik pada tahap berikutnya,sebagaimana servis peribadi seperti mengunting rambut, pengharapan dan persepsi pengguna tidak wujud banyak perbezaan.

Katakunci: SERVQUAL, sampah, sampah domestik



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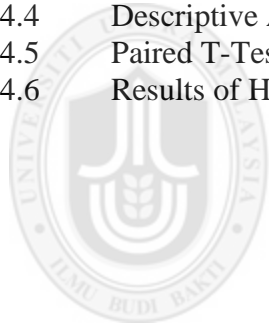
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## LIST OF ABBREVIATIONS

SERVQUAL      Service Quality



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Customers are the backbone of a business. Without customers the business transaction will not take place. Customers nowadays are more knowledgeable as they could access information from various sources before engaging themselves with a product or service. Thus the issue of service quality come into light.

Service quality is the key ingredient for every customer (Petkova *et al.*, 2000). While customer is the key person who describes the quality (Berry *et al.*, 1993).The issue of service quality is to identify the level of service required by consumers and ways to maintain or improved the existing level. This would then lead to the satisfaction of the consumers. Achieving customer satisfaction is among the main aims of any profit and non-profit organization. Organizations execute various programs to make customer delight with the purpose of retaining them for a longer period.

Service quality is commonly regarded as antecedents of customer loyalty (Saleem & Raja, 2014; Bolton et. al., 2000; Bowen & Chen, 2001; Parasuraman *et al.*, 1996). Service quality is considered an evaluation between service prospect and what actually

has been received (Parasuraman *et al.*, 1985). Customer satisfaction towards the quality of certain services will determine the company's failure or success (Fečiková, 2004).

Waste is any unwanted material intentionally thrown away for disposal (Oresanya, 1998). Waste products arise from our ways of life and they are generated at every processing stage of production and development. The knowledge of the sources and types of waste in an area is required in order to design and operate appropriate solid waste management systems (Tchobanoglous *et al.*, 1993). Waste management is an important element of environmental protection (Oyelola & Babatunde, 2013).

## **1.2 Problem Statement**

Solid waste management remains a major challenge to most governments in developing countries in view of the increasing volumes of waste materials generated and disposed to the environment in urban areas (Akaateba and Yakubu, 2013). For example, the effective waste management in Vietnam is achieved through employing subcontractors with waste management ability, conducting training, auditing and providing close supervision of subcontractors and workers, sequencing activities to reduce damage to completed work, setting set level of wastage allowable, and enforcing these through rewards and punishments (Ling and Nguyen, 2013). As a result, many governments have embraced public-private partnerships to improve the effectiveness and efficiency in the delivery of waste management services (Akaateba and Yakubu, 2013).

The domestic waste collection services was previously carried out by Selayang Municipal Council. However in recent years there are an increased number of new housing areas in Selayang Municipal Council. This has also caused an increasing volume of waste materials generated and disposed to the environment in urban areas of Selayang Municipal Council. However, Selayang Municipal Council has limited number of staff and machinery. This has led MPS could not perform their own domestic waste collection services. Complaints from residents increased day by day as they pay taxes and expect the best services from Selayang Municipal Council. This development has pushed Selayang Municipal Council to engage the private contractors to participate in providing the domestic waste collection services to the public in Selayang Municipal Council.

Selayang Municipal Council has appointed 31 domestic waste collection service contractors to assist Selayang Municipal Council in ensuring the efficient domestic waste collection service is carried out. Complaints received from customers are monitored and appropriate actions are carried out. Below is the total number of domestic waste collection complaints received between the months of January to May 2016.

**Table 1.1**  
*Number of Domestic Waste Collection Complaints (Jan – May 2016)*

<b>Jan</b>	<b>Feb</b>	<b>March</b>	<b>April</b>	<b>May</b>
188	192	141	109	89

Source: Selayang Municipal Council, 2016



Since the public-private partnership is executed, Selayang Municipal Council is very much interested in monitoring the public satisfaction level on domestic waste collection. Therefore the purpose of this study is to examine the level of customer satisfaction regarding the domestic waste collection service in Selayang Municipal Council.

### **1.3 Research Questions**

RQ1: Is there a difference between the expectation (pre-test) and perception (post-test) of the service quality tangibility received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council?

RQ2: Is there a difference between the expectation (pre-test) and perception (post-test) of the service quality reliability received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council?

RQ3: Is there a difference between the expectation (pre-test) and perception (post-test) of the service quality responsive received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council?

RQ4: Is there a difference between the expectation (pre-test) and perception (post-test) of the service quality assurance received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council?

RQ5: Is there a difference between the expectation (pre-test) and perception (post-test) of the service quality empathy received from the waste collection service contractors in Batu District, Selayang Municipal Council?

#### **1.4 Research Objectives**

Based on the research questions stated above, the research objectives for this study is as follows:

RO1: There is a difference between the expectation (pre-test) and perception (post-test) of the service quality tangibility received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council.

RO2: There is a difference between the expectation (pre-test) and perception (post-test) of the service quality reliability received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council.

RO3: There is a difference between the expectation (pre-test) and perception (post-test) of the service quality responsiveness received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council.

RO4: There is a difference between the expectation (pre-test) and perception (post-test) of the service quality assurance received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council.

RO5: There is a difference between the expectation (pre-test) and perception (post-test) of the service quality empathy received from the domestic waste collection service contractors in Batu District, Selayang Municipal Council.

### **1.5 Scope and Limitations of the Study**

The scope of this study is only on the domestic waste collection services in the Batu District, Selayang Municipal Council. Thus it does not cover other types of wastes from the industrial, business and public areas such as parks.

This study adopts the SERVQUAL approach in investigating the level of service quality as expected by consumers and the actual level received by the consumers cum residents. Therefore the variables examine are the reliability, assurance, tangibility, empathy and responsiveness components of the SERVQUAL approach.

Another limitation of this study is the distribution of the questionnaire only covers the residents residing in the Batu District of Selayang Municipal Council. The ability to gather the primary data greatly depends on the cooperation of the residents in filling up the questionnaire given to them

## **1.6 Organization of the Thesis**

The report of this thesis is divided into five main chapters. Chapter one discusses on the background of the study, problem statement, research questions, research objectives and the scope and limitation of the study. Chapter two discusses on the review of the literature on the service quality and waste management and the relationship between the two. The SERVQUAL is also highlighted as the underpinning theory to this study. Chapter three discusses the methodology employed in this study such as the research framework, research design, hypotheses formulation, and the development of the research instrument, the data collection procedure and the type of analysis carried out on the data in order to test the hypotheses. Chapter four discusses the results of the data collected based on the descriptive and paired T-test. The summary of the results from the hypotheses testing is covered before the end of the chapter. The final chapter which is chapter five recapitulate the study before the discussion on the implication of the study based on the initial research objectives is presented. The recommendation and contribution of this study concludes the thesis report.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

In this chapter will touch on the literature review for service quality, domestic waste management, the variables and the SERVQUAL approach as the underpinning theory to this study.

#### **2.2 Service Quality**

The ten principles of service quality dimension or determinants was attempt by group of authors named Parasuraman (1985), Zeithaml (1990) that highlighted on main component of high quality that is applied as a quality management framework conclude that customer applied comparatively much the same principle in assessing service quality. The SERVQUAL authors originally identified ten elements of service quality, but in later work, these were collapsed into five factors - reliability, assurance, tangibles, empathy and responsiveness.

To improve the service performance, SERVQUAL able to measure and manage service quality by using questionnaire as indicator to analyses both expectation and actual service

received using comprehensive five dimensions. The result will depend on the different on pre and post service received. When customers actual experience received are less than what they expected, service quality is deemed low and vice versa.

$$\text{Service Quality} = \text{Customers' Perception} - \text{Customers' Actual Experience}$$

Reliability refers to the management ability to perform the promised service correctly, effectively and precise way (Peer & Mpinganjira, 2011). Reliability in keeping promises when promises to do something by a certain time, offering products and services of utmost quality, issuing contracts with clear, transparent and non-ambiguous terms, settling customers claims with no unnecessary delays, showing sincere interest when solving customers problems, offering services right the first time without unnecessarily discomforting customers, providing services within the specified contract time limits, issuing error free bills, statements, receipts, contracts, claims and other documents. Ability to perform the promised service dependably and accurately (Parasuraman et.al, 1998 and 1990). Reliability has frequently been shown to be the most significant among all components of SERVQUAL.

Assurance refer to customers feeling safe in their transactions, behavior instilling confidence in customers, being consistently courteous with customers, having employees and agents with the necessary knowledge to give professional services to customers. Assurance in getting customer's trust and stimulating their confidence to use the service

offered. Peer and Mpinganjira (2011) stated that this is primarily essential aspect for services that might be perceived to be related with high grades of danger, and also where the customer is not capable of properly assessing the service. Knowledge and courtesy of employees and their ability to convey trust and confidence through competence, courtesy, creditability and security of the service (Parasuraman *et.al*, 1998; 1990).

Tangibility refers to certain material depictions of the service (Gray, 2007), that manifestation of the physical evidence of the service. Kotler, Bowen and Makens (2006) said hospitality industry should aware on SERVQUAL dimension, which are intangibility which means the service that we cannot touch by hand but we can feel or experience by feeling or emotions. In this study tangibility is refer to modern equipment and technology, visually appealing physical facilities neat appearing employees and agents, visually appealing materials associated with services. This is such as the appearance of physical facilities, equipment personnel and communication material (Parasuraman *et.al*, 1998 and 1990).

Empathy is refer to giving customers individual services, operating hours convenient to all customers, giving customers personal attention, having the customer's best interest at heart, understanding the specific needs of customers. Caring, individualized attention the firm provides its customers where customers could access to organization's representatives, communication and understanding the customer (Parasurman *et.al*, 1998; 1990). The attitude of person that shows caring and sincerity attitude demonstrates especially in service environment and when handling customers or patient (Parasuraman,

1988) defined empathy as the care and individualized attention that an organization provides to the customers. It's determined compassion, service providers that they are conscious every customer is a unique human being with different character and needs.

Responsiveness refer telling customers exactly when the services will be performed, doing their best to give prompt service to customers, always willing to help customers, never being too busy to respond to customer's requests . Willing to help customer and provide prompt service (Parasuraman et.al, 1998 and 1990). According to (Peer & Mpinganjira, 2011) this component stresses reflection as well as speed in managing customer queries, complaints, feedback requirements and inconveniences.

As presented in the above conceptual model, the independent variable of dimensions of service quality will be studied .Theoretical research has presented several different service quality definitions. However, Parasuraman *et al.* (1985) definition of service quality, which has been used in many industry studies before, was adopted. Service quality is defined as "the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance". The SERVQUAL model developed by Parasuraman *et al.* (1998), is therefore used for this study



### 2.3 Waste Management

Managing waste and waste management system are getting its importance in most countries in the world. Globalization creates sophisticated life when everything is based on high-technological usage including waste management. It is an important management because it will ensure the human healthiness and well-being. Waste management commonly refers as the managing process which involved the waste collection, transportation, treatment and lastly the disposal process. This process included the household waste, industrial waste, agriculture waste, health care waste, and etc. which every states applied the same or different waste management system that suit with the geographic (Oyelola & Babatunde, 2013; Huang, Wang, Bai, & Qiu, 2013; Silvennoinen et. al, 2014; Nnaji, 2015).

Waste management is important to reduce waste impact to the human health and the environment (Guerrero, Maas, & Hogland, 2013; Yng Ling & Ahn Nguyen, 2013; Elsaid & Aghezzaf, 2015). Thus the management tends to split the task between public institutions and private company in managing the waste in order to achieve its objectives (Akateeba & Yakubu, 2013; Sharma et. al, 2013). In developed states the high-tech waste management successfully developed with the help of high awareness and educated residents. As compare to developing states, the management there are still dealing with satisfaction and behavior issue and struggling to achieve the waste management objectives (Akateeba & Yakubu, 2013; Sharma et. al, 2013; Liu & Huang, 2014; Sunder

& Rangasami, 2016). The quality of the management certainly related to customers' satisfaction and somehow the customers' behavior are also affected the waste management system (Kondrotaite, 2012; Silvennoinen et. al, 2014; Amorim & Saghezchi, 2014; Chatzoglou et. al, 2014; Bakti & Sumaedi, 2015).

Technically, waste management is important to achieve the satisfaction of the management and authorities. Thus the policy that applied must suitable with the demographic of the area. As mentioned earlier, between developed and developing states there are different result of services quality which traced by customers' satisfaction and also customers' behavior. Hence it is significant for a policy maker to understand and analyzed which waste management models or concepts to suit with the waste management system of their country. It is require the whole stakes holder to perceive and utilized the system correctly because if they are not perceived it well then it would harm the human health and environmental health (Huang, Wang, Bai, & Qiu, 2013; Silvennoinen *et. al*, 2014). The proper coordination among the authorities is vital so the applied system will succeed (Bildsten, 2011). For example, Nnaji (2015) reported due to dysfunctional of many municipal waste management authorities in Nigeria, most of the cities have been flooded by open dumps which 50% of how the residents in the cities dispose their waste. Thus it has intoxicates the agriculture soils and affected the water supply.

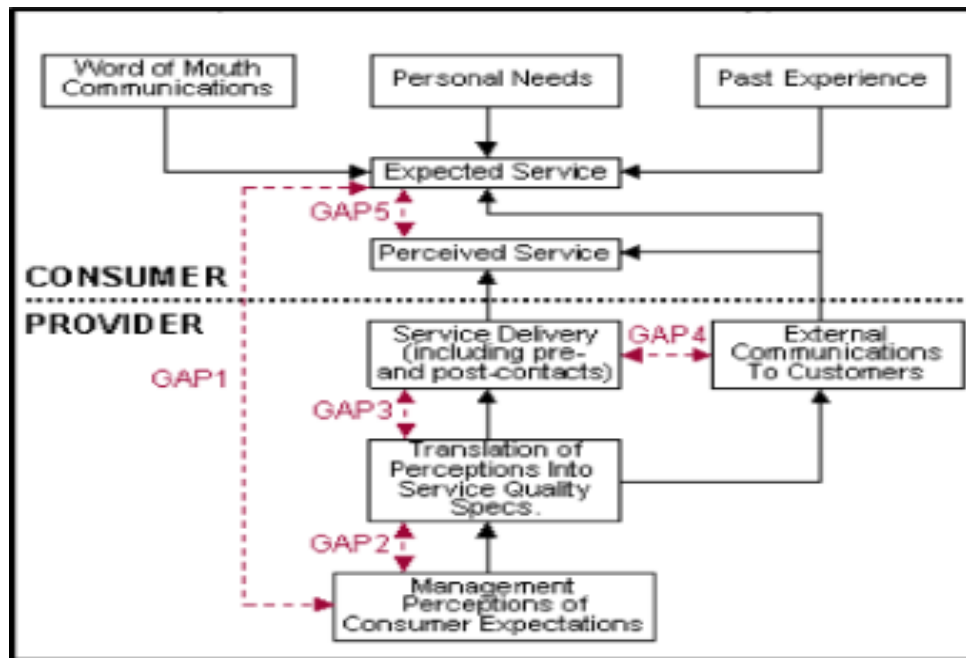
Most of the states applied the same waste management system of collection, transport and disposal of the wastes which many of the services are charged by the local authority such as the daily house-to-house collection. However in Sharma et. al (2013) reported most of Ethiopian disposed their wastes near roadsides and vacant areas, in open sewers, bank of rivers and around bushes because they are still have not initiate the house-to-house waste collection. The public institutions must be able to provide quality public services and ensure quality of life for local residents (Kondrotaitė, 2012). Besides that there are states that hire subcontractors with waste management capability. The subcontractors need to conduct the training for the workers and the local authorities are responsible in observing the relationship of subcontractors and workers. This system applied in Ho Chi Minh, Vietnam where it is successfully adapted and the residents are satisfied. Because the system applied improved environmental authorizations, reduce the disposal and transportation costs, creates income from reuse and recycling, and reduced cost of materials (Shirsendu, 2010; Yng Ling & Ahn Nguyen, 2013). Moreover, there is sustainable waste management it is involved the process of material re-use and recycling, composting, incineration and energy production and land-filling. This design looks for more effectiveness and integrated sustainable waste management system that applicable for developing economies. For instance Elsaid and Aghezzaf (2015) proposed the sustainable waste management system for Cairo as this city is developing its economy. The industrialization that keeps developing shows it is importance for Cairo to keep the environmental stability.

To conclude, the waste management system is important for human as it will preserved healthy environment for human and reduce the risk of intoxicated surrounding. Hence it is vital for the authorities to decide which waste management system suitable for their area by counting their ability in managing the cost, and to observe all the stakes holders that participate in the system. Again, the proper coordination of a system would result high satisfaction of the residents and the authorities (Shirsendu, 2010; Bildsten, 2011; Kondrotaite, 2012; Yng Ling & Ahn Nguyen, 2013).

## **2.4 Underpinning Theory**

Parasuraman's (1985) SERVQUAL model proposed a quality measurement formulated based on gap analysis which a part of the differences concerning expectation and performance from patient. Thus, the SERVQUAL model above served as the underpinning theory for this research.

The model demonstrates the relationship between activities and their relationship with main service activities that contributed to the on actual service received quality by the patients. Ghobadian, Speller and Jones (1994) noted there is connection portrayed as gaps or discrepancies in pre and post service which also represent a gap which is a major barrier to accomplishing a level of satisfaction in service quality.



**Figure 2.1**  
*Service Quality Gaps Model*

Gap 1 – refers to the gap due to the differences between customer expectation and management perception. For example, the management might not completely understand the customers' expectation in terms of their needs and wants of a service. This might affect the perception of the quality.

Gap 2 - refers to the differences between management perceptions of customers' expectations and actual service quality delivered necessities based on the perception. To the customers, this may be undesirable service-quality standards. Factors such as market constraints, management commitment and limitation of resources can attribute to this gap.

Gap 3 - refers to the variation between service quality supplies and the actual service rendered to customer, for example, the service performance gap including in pre and post and transaction of perception. This is because there are no specific guidelines to performing and treating service well and thus the high quality might not guarantee. As the delivery process not standardized it will impact the service quality..

Gap 4 - refers to the differences between service delivery and the communications to customers about service delivery and whether assurances correspond with real time delivery. For example, initially management could have created high expectations from through its communication to customers. If the service standard delivered overtime declined, customers may feel the promises are not delivered. External communication can influence customers' perception towards service quality.

Gap 5 – refers to the deviation between customers' expectation and perceived valuations of service in real time situation. However, this also depends on what customers make out of the real service performance based on their previous or past experience expectations. This gap depends on the extent and course of the four gaps related with the delivery of service quality on the provider's side. The main point is to make sure that customers are happy and satisfied with the service quality as expect from the service offered.

## 2.5 Summary

This chapter discusses the three main review of the literature, which are the service quality, the waste management and the variables. Service quality approach known as SERVQUAL is the framework adopted and adapted in this study. The discussion on waste management also highlighted the importance of waste management and waste management process in the current situation.



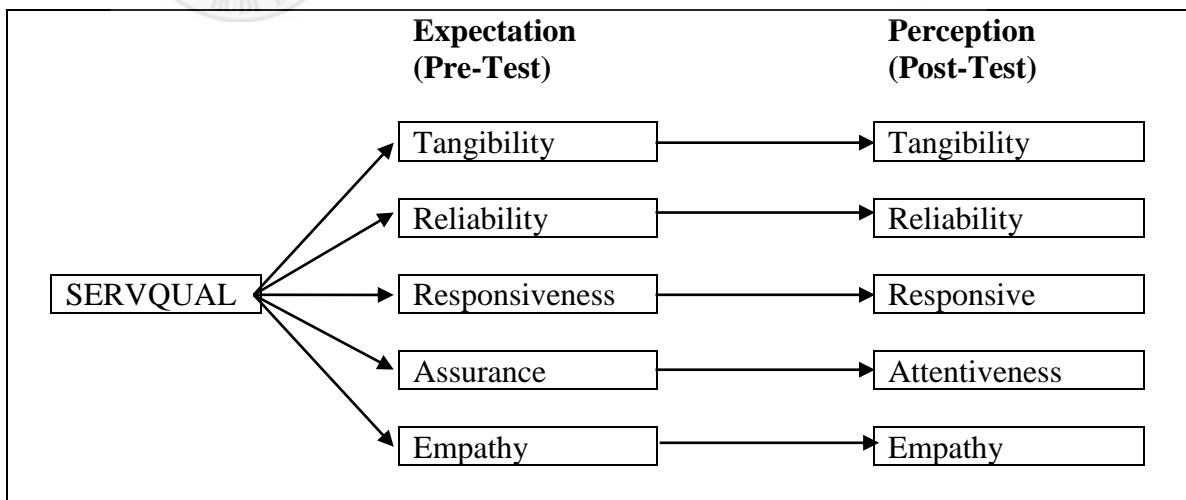
# CHAPTER THREE

## METHODOLOGY

### 3.1 Introduction

This chapter explains the methodology used in this study which covers the research framework, research hypothesis, research approach, operational definition of the variable, the research instrument and the measurement, the pilot test, research population frame, sample size, sampling approach, data collection method and the data analysis technique employed in this research.

### 3.2 Research Framework



**Figure 3.1**  
*Research Framework*



The research framework of this study is based on SERVQUAL approach by Parasuraman, Zeithml and Berry (1988). This framework is basically replicates the pre and post data collection on the same respondents on the each of the variables of the SERVQUAL. In the pre-stage, the respondents were asked on their expectation level of the service quality that they expect to receive. While in the post-stage or the perception is the stage where they already consumed the service and are reflecting their perception of the service received.

### **3.3 Hypotheses**

The discussion on the hypotheses development is broken down into each of the SERVQUAL elements as the following.

H1: There is a difference between the expectation and perception of the service quality tangibility received from the waste collection service contractors in Batu District, Selayang Municipal Council.

H2: There is a difference between the expectation and perception of the service quality reliability received from the waste collection service contractors in Batu District, Selayang Municipal Council.

H3: There is a difference between the expectation and perception of the service quality responsiveness received from the waste collection service contractors in Batu District, Selayang Municipal Council.

H4: There is a difference between the expectation and perception of the service quality assurances received from the waste collection service contractors in Batu District, Selayang Municipal Council.

H5: There is a difference between the expectation and perception of the service quality empathy received from the waste collection service contractors in Batu District, Selayang Municipal Council.

### 3.4 Research Design

**Table 3.1**  
*Components of the Research Design*

<b>Research Design</b>	<b>Type</b>
Type of study	Quantitative method
Purpose of the study	Descriptive and hypotheses testing
Type of investigation	Group differences
Extent of researcher interference with the study	Minimal interference
Study setting	Field study
Unit of analysis	Individuals
Time horizon	Cross sectional

As shown in the table 3.1, this study employed a quantitative approach where the primary data are collected from the target respondents in the study area in order to answer the research hypothesis. The primary data were collected using the questionnaire adopted and adapted especially from the SERVQUAL study. The employment of questionnaire is also to reduce the influence of the researcher on the respondents. The respondents are individuals who reside in Batu District, Selayang Municipal Council.

### **3.5 Operational Definition**

SERVQUAL is a framework to measure customer satisfaction in five dimensions of service, namely: Tangibles dimension are such as physical space, environmental conditions and service delivery including facilities, equipment, personnel and communication channels. Reliability dimension are the ability to serve secure and reliable forms of services. Responsiveness dimension covers the willingness to cooperate and assist the customer. Assurance dimension is the competency of personnel for induction trust and confidence to customer. Empathy is especially dealing with each customer according to their mood so that customers are convinced that organization has understood them (Parasuraman *et al.*, 2004). Measurement of service quality is only possible through determining customer satisfaction. Customers' service quality perceptions arise from comparison of their expectations prior to having a service with the actual service experiences. If the expectations are met, the service is satisfactory. Service quality is defined as the difference between the perceived quality and expected quality. If the

service perceived by the customer meets the expectations, there will be very little, if any, differences between what is perceived and expected. If the expectations are low and perceptions are high, there is high quality; if the expectations are met completely, there is accurate quality; and if the expectations are high but perceptions are low, there is low quality (Parasuraman & Berry, 1985; Parasuraman, Zeithaml & Berry, 1988).

**Table 3.2**  
*Operational Definition*

<b>Element</b>	<b>Operational Definition</b>
Tangibility	The element that represents the appearance of the personal, physical facilities, equipment and communication materials.
Reliability	The element of service provider's abilities to perform the promised service dependably and accurately
Responsiveness	The element of willingness to help customers and provide prompt service
Assurance	The element that represents the knowledge and courtesy of service providers and their ability to convey trust and confidence
Empathy	The element of the ability of the service provider in providing attention individually to each customer

### **3.6 Instrumentation**

The discussion on instrumentation will cover the instrumentation elements, questionnaire format, the translation process and the pilot test conducted on the questionnaire.

**Table 3.3**  
*Instrumentation Elements*

Item	Description
Instrument	Closed ended questionnaire
Measurement scale	Likert scale
Translation	English to Malay
Format of questionnaire	Closed ended
Pilot Test	Cronbach Alpha Statistics

The research instrument used in this study is the questionnaire. The questionnaire adopted and adapted from the original study using SERVQUAL by Parasuraman, Ziethaml and Berry (1988). The questionnaire is comprise of 22 items representing five dimensions namely: (i) reliability, (ii) assurance, (iii) tangibility, (iv) empathy and, (iv) responsiveness — with the acronym label as RATER. The five point Likert scale is used with 1 represent “not satisfied” and 5 represent “very satisfied”. The reliability dimension has five items, assurance dimension has four items, tangibility dimension has four items, empathy dimension has five items and responsiveness dimension has four items. The original items in the responsiveness and empathy dimensions were negatively worded in the questionnaire. Thus the process of recoding the items to positively worded items was conducted during the initial stage of the data cleaning process.

The questionnaire adopted and adapted also goes through the translation process because Malay is the language understood by the most of the targeted respondents in Bandar Baru Selayang. The earlier translation version was given to several people who are well verse in both English and Malay to ensure the sentences in both English and Malay carries the

same meaning. Some adjustment was carried out on the comments received on the final draft of the questionnaire.

**Table 3.4**  
*Questionnaire Format*

Section	Item
A	Background of Respondents
B	Expectation / Pre - Test Questions
C	Perception / Post - Test Questions

As shown in the table above, the questionnaire was formatted into three main sections. The first section is on the background of the respondents. This is followed by the research items on expectation or pre-test statements and subsequently by the research items on perception / post-test statements.

**Table 3.5**  
*Reliability Analysis for Pilot Study*

Variables	Expectation / Pre-Test	Perception / Post-Test
Responsiveness	.906	.865
Assurance	.901	.872
Tangibility	.869	.829
Empathy	.858	.819
Reliability	.895	.888

The Cronbach Alpha statistics for the pilot study for expectation / pre-test and perception / post-test variables is as shown in the table above. The Cronbach Alpha's statistics shows that the items can be used in the following actual data collection phase.

### 3.7 Data Collection

The discussion on data collection is divided into three main sections, which are the population frame, the sample size, sampling approach and data collection procedure.

#### 3.7.1 Population

**Table 3.6**  
*Population in Selayang Municipal Council*

<b>District</b>	<b>Population</b>	<b>Total</b>
Rawang	88,836	
Batu	285,100	
Setapak	36,379	410,315

[www.SelayangMunicipalCouncil.gov.my/ms/pelawat/info-selayang/page/0/2/](http://www.SelayangMunicipalCouncil.gov.my/ms/pelawat/info-selayang/page/0/2/) accessed 1 June 2016

The population of this study are the residents residing in the Selayang Municipal Council. Selayang Municipal Council is divided into three main districts namely, Rawang District, Batu District and Setapak District. The total population in all districts is shown in the table above based on published available data. However, about 69 percent of Selayang Municipal Council population are in District of Batu. For the purpose of data collection, District of Batu is chosen as the area for questionnaire distribution. Primary data are gathered from a representative of each household in the study area. The number of houses in Batu District for the year 2016 is shown in table below.

**Table 3.7**  
*Number of Houses in Batu District in 2016*

<b>Batu District</b>	<b>Number of Houses</b>
Taman Desa Indah	102
Taman Selayang Mulia	180
Taman Jasa Perwira	1312
Bandar Baru Selayang	4416
Taman Jasa Utama	484
Kg. Bendahara	291
Kg. Sg. Kertas	188
Other Public Facilities	1404
<b>Total</b>	<b>9673</b>

Source: Selayang Municipal Council, 2016

### 3.7.2 Sample Size

There are seven main housing and several public facilities areas in the Batu District as shown above. For the purpose of determining the sample size, only the housing areas are taken into consideration. The public facilities areas such as parks, hawkers' centre, public toilets, cemetery, mosques and other related public areas are not considered part of the population in this study. Based on Krecjie and Morgan (1970) sampling size table, the appropriate sample size for a population of 6, 973 houses are 382 houses. The number of questionnaire to be distributed in each of the housing area is as shown in the table below. In order to obtain the sample size of 382 as suggested by Krecjie and Moran (1970), an additional of 18 questionnaire was being added whereby the final total of 400 questionnaires were distributed to the sampling area.



### 3.7.3 Sampling Method

**Table 3.8**  
*Sampling Distribution*

<b>Batu District</b>	<b>Number of Houses</b>	<b>Sample</b>
Taman Desa Indah	102	6
Taman Selayang Mulia	180	10
Taman Jasa Perwira	1, 312	72
Bandar Baru Selayang	4, 416	242
Taman Jasa Utama	484	26
Kg. Bendahara	291	16
Kg. Sg. Kertas	188	10
Total	6, 973	382

As shown above, the sampling method employed in this study is the stratified sampling method where the number of questionnaire distributed is according to the number of registered houses in each of the housing area.

### 3.7.4 Data Collection Procedures

The residents in the housing areas identified were approached and asked for their cooperation in answering the questionnaire. The respondents were being encourage answering the questionnaire on the spot and were given some time to answer the questionnaire. Most respondents answer the questionnaire themselves while a small proportion were assisted in answering the questionnaire.

### 3.8 Techniques of Data Analysis

The SERVQUAL approach compares the mean before and after consumers received the service from the service provider. Therefore, the difference in the mean before and after receiving the service is compared to identify the differences occurred. As shown in the table is the data analysis technique employed in this study.

**Table 3.9**  
*Technique of Data Analysis*

<b>Elements</b>	<b>Data Analysis Technique</b>
Background of respondents	Percentages and Frequency
Responsiveness	Mean and Paired T-Test
Assurance	Mean and Paired T-Test
Tangibility	Mean and Paired T-Test
Empathy	Mean and Paired T-Test
Reliability	Mean and Paired T-Test

### 3.9 Summary

This study employs the quantitative approach and thus the discussion on the development of the questionnaire in terms of the research items, measurement scales and the pilot test are covered. The issue on the population, sample size and the sampling method was also highlighted. Finally the statistical analysis employed is also being discussed

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

In this chapter, the discussion focuses on treatment and the statistical analysis carried out on the filed data collected. The types of statistical analysis carried out are the descriptive analysis and the paired T-test for the purpose of hypotheses testing.

#### 4.2 Treatment on Field Data

**Table 4.1**  
*Field Data Collected*

	Amount
Number of Questionnaire Distributed	400
Number of Questionnaire Collected	400
Number of Usable Questionnaire	399

As shown above, the number of questionnaire distributed to the sampling area is 400. Respondents were approached at their dwelling and given the questionnaire for them to answer on their own. If the respondents faced difficulty while answering the questionnaire, respondents will be given assistance as required by respondents.

Fortunately all respondents approached have given their cooperation to answer the questionnaire. At the end of the data collection period, 400 questionnaires were successfully collected back.

Each questionnaire was scanned for incomplete questionnaire or unanswered items for the purpose of initial cleaning. Once this process is completed, only one questionnaire was found not to be completed. This questionnaire was later discarded. The following process was punching in the data into the SPSS data file. The data file is later check for any inconsistency between the data in the questionnaire and the data punched in the data file.

### 4.3 Reliability Test

**Table 4.2**  
*Reliability Analysis*

	Items	Cronbach Alpha	
		Expectation (Pre-test)	Perception (Post-test)
Tangibility	4	.906	.865
Reliability	5	.901	.872
Responsiveness	4	.869	.829
Assurance	4	.858	.819
Empathy	5	.895	.888

The statistically analysis to compute the Cronbach Alpha results was conducted where the results, as shown in the table above, indicates that all the items are within the acceptance value.

#### 4.4 Demographics Analysis

**Table 4.3**

*Background of Respondents*

		Frequency	Percentage
Gender	Male	242	60.7
	Female	157	39.3
	Total	399	100
Status	Single	80	20.1
	Married	282	70.7
	Single parent	37	9.3
	Total	399	100
Age	< 17	7	1.8
	18 – 29	77	19.3
	30 – 39	165	41.4
	40 – 49	109	27.3
	50 – 59	38	9.5
	> 60	3	0.8
	Total	399	100
Education	Secondary school	122	30.6
	Certificate	93	23.3
	Diploma	74	18.5
	Bachelor	98	24.6
	Masters	10	2.5
	Doctorate	2	.5
	Total	399	100.0
	Income	< RM1,000	1
RM1,001 – 5,000		34	8.5
RM5,001 – 10,000		248	62.2
RM10,001-15,000		108	27.1
> RM15,000		5	1.3
Total		3	.8

## 4.5 Descriptive Analysis

**Table 4.4**  
*Descriptive Analysis of Variables*

Variable	Item	Expectation (Pre-test)		Perception (Post -Test)	
		Mean	SD	Mean	SD
Tangibility	1	3.44	.900	3.47	.795
	2	3.46	.858	3.44	.761
	3	3.53	.841	3.48	.736
	4	3.55	.834	3.53	.739
	Overall	3.49	.758	3.48	.639
Reliability	1	3.56	.854	3.51	.763
	2	3.54	.864	3.51	.766
	3	3.64	.802	3.71	.768
	4	3.59	.815	3.59	.706
	5	3.63	.841	3.59	.707
	Overall	3.59	.707	3.57	.613
Responsiveness	1	2.46	.864	2.50	.722
	2	2.42	.834	2.49	.760
	3	2.42	.847	2.51	.786
	4	2.54	.907	2.58	.849
	Overall	2.46	.732	2.52	.635
Assurance	1	3.54	.837	3.46	.756
	2	3.58	.858	3.46	.762
	3	3.79	.739	3.45	.806
	4	3.67	.754	3.65	.734
	Overall	4.46	.732	3.51	.616
Empathy	1	2.44	.827	2.51	.740
	2	2.48	.817	2.52	.753
	3	2.41	.790	2.54	.732
	4	2.46	.837	2.49	.740
	5	2.40	.837	2.51	.763
	Overall	2.44	.684	2.51	.620

As shown in the table above, the highest item mean for Tangibility's expectation (mean = 3.55, SD = .834) is item 3 which state "The domestic waste collection contractor's workers should dress appropriately for the job". The highest item mean for Tangibility's perception (mean = 3.48, SD = .736) is also item 3 – "The domestic waste collection contractor's workers are well dress appropriately for the job". Customers do feel that appropriate dress code for the job and workers are important as it is also a way to convey the type and level of service to be delivered and / or received.

The second dimension is reliability. The highest mean for expectation (mean = 3.64, SD = .802) is the third item – "The domestic waste collection contractor should be dependable". The highest mean for perception (mean = 3.71, SD = .768) is also the third item with the statement "The domestic waste collection contractor is dependable". There is a slight decline with a difference of .02 has occurred in how consumers perceived the dependability of the service by the private domestic waste collection contractors.

The following dimension is responsiveness. The original item statements are negatively worded. The score received are later recoded into positive scale. The highest mean for expectation (mean = 2.54, SD = .907) is item four with the statement - "It is okay if the workers of the domestic waste collection contractor are too busy to respond to customer requests promptly". While the highest mean for perception (mean = 2.58, SD = .849) is also item four with the statement - "Workers of the domestic waste collection contractor are too busy to respond to customer requests promptly". The difference between

expectation mean and perception mean has increased by 0.04. Here customers are highlighting their perception that the workers are too busy doing their job to respond to customers' request immediately. It will be beneficial for Selayang Municipal Council to look into this matter.

In the assurance dimension, the highest mean for expectation is item three (mean = 3.79, SD = .739) with item statement – “The workers should be polite”. While the highest mean for perception (mean = 3.65, SD = .734) is the fourth item statement - “Workers get adequate support from the contractor to do their jobs well”. Overall there is a difference of 1.05 between overall expectation mean and overall perception mean. During the expectation period, consumers felt the politeness of the workers is important. However after receiving the service and from their observation the consumers felt that the workers are doing their job well due to the support from their employers.

The final dimension is empathy. The item statements are negatively worded. The score are later recoded into positive scale during the data processing stage. The highest mean for expectation is item two (mean = 2.48, SD = .817) with the item statement – “The workers cannot be expected to give customers personal attention”. The highest mean for perception is item three (mean = 2.54, SD = .732) with the item statement - “The workers do not know what your needs are”. Overall there is a difference of 0.07 between the overall expectation mean and overall perception mean. In this dimensions, consumers felt that the workers may not know other needs of consumers related to domestic waste



collection. Additional information and brief training may be beneficial to ensure customers are served accordingly.

#### 4.6 Paired T-Tests

**Table 4.5**  
*Paired T-Test*

		Mean	SD	t	Sig (2-tailed)
Responsiveness	Expectation (Pre-Test)	2.46	.732		
	Perception (Post-Test)	2.52	.635		
	Paired T test	-.065	.711	-1.831	.068
Assurance	Expectation (Pre-Test)	3.65	.669		
	Perception (Post-Test)	3.51	.616		
	Paired T test	.139	.684	4.060	.000
Tangibles	Expectation (Pre-Test)	3.49	.758		
	Perception (Post-Test_	3.48	.639		
	Paired T test	.015	.736	.408	.683
Empathy	Expectation (Pre-Test)	2.44	.684		
	Perception (Post-Test)	2.51	.620		
	Paired T test	-.077	.730	-2.099	.036
Reliability	Expectation (Pre-Test)	3.59	.707		
	Perception (Post-Test)	3.57	.613		
	Paired T test	.016	.690	.450	.653

As shown in the table 4.6, assurance dimension ( $t = 4.060$ ,  $\text{sig} < 0.05$ ) and empathy dimension ( $t = -2.099$ ,  $\text{sig} < 0.05$ ) are significant. Whereas three other dimensions namely: tangibility, reliability and responsiveness, are not significant. Thus expectation and perception of consumers on tangibility, reliability and responsiveness of the domestic waste collection service by the contractors are the same before and after receiving the

service. However assurance dimension is very significant dimension in the quality service of the domestic waste collection services in Selayang Municipal Council. This is followed by empathy dimension of the quality service.

#### 4.7 Results of Hypotheses Testing

**Table 4.6**  
*Results of Hypotheses Testing*

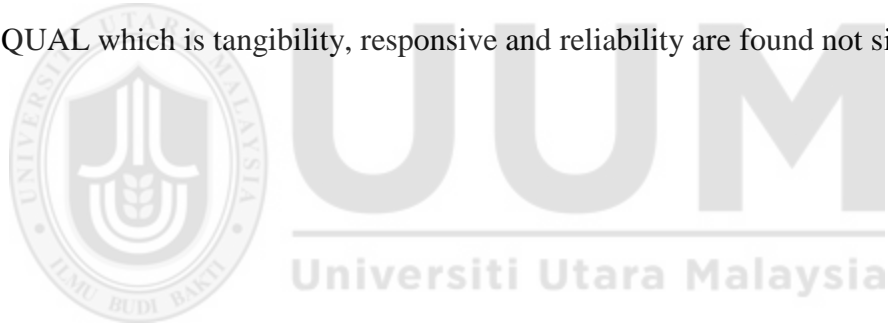
Hypotheses Statement	Results
H1 There is a difference between expectation mean and perception mean on responsiveness.	Not significant $t = -1.831; p > 0.05$
H2 There is a difference between expectation mean and perception mean on assurance.	Significant $t = 4.060; p < 0.05$
H3 There is a difference between expectation mean and perception mean on tangibility.	Not significant $t = 0.408; p > 0.05$
H4 There is a difference between expectation mean and perception mean on empathy.	Significant $t = -2.099; p < 0.05$
H5 There is a difference between expectation mean and perception mean on reliability.	Not significant $t = 0.450; p > 0.05$

Based on the results of the paired T-test as shown in Table 4.6, only two hypotheses are accepted. The two dimensions of SERVQUAL accepted are: (i) assurance ( $t = 4.060, p < 0.05$ ) and, (ii) empathy ( $t = -2.099; p < 0.05$ ). It could be concluded that: (i) there is no difference on the tangibility, reliability and responsiveness dimension before and after receiving the domestic waste collection service among the consumers and, (ii) assurance

and empathy dimension has affected the efficiency of the domestic waste management service quality that is being provided by the private contractors.

#### **4.8 Summary**

The results of the descriptive analysis were conducted on the background of the respondents and each of the five SERVQUAL components in this study. Followed is the paired T-test statistical analysis conducted on the data collected. Only two of the SERVQUAL components which is assurance and empathy do have an impact to the residents in Batu District, Selayang Municipal Council. Three other component of the SERVQUAL which is tangibility, responsive and reliability are found not significant.



## CHAPTER FIVE

### CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

In this final chapter of the thesis, the study is recapitalized. This is followed by the findings by each of the research objectives of this study. Subsequently, the discussion is on the recommendations from both the academic and managerial perspectives are presented. Finally the contribution of this study is highlighted.

#### 5.2 Recapitulation of the Study

This study was conducted with the objective to investigate the service quality level received by the residents in the Batu District in the Selayang Municipal Council regarding the domestic waste management services rendered. Selayang Municipal Council has contracted out the domestic waste management services to the private sector in recent years. The motivation carrying out this study was also due to the number of complaints received from the residents cum customers. Thus it is important to monitor the level service quality received by the residents cum customers.

Based on the SERVQUAL approach, this study adopts and adapts the original questionnaire developed by the original researcher of SERVQUAL. The study area was focus in the Batu District of Selayang Municipal Council as the number of residents is highest in the area. Questionnaire was distributed to the residents and the response was unexpectedly high. The data was then cleaned in order for the statistical analysis to be carried out. The descriptive and paired T-test was conducted on the data for the purpose of hypotheses testing.

The hypotheses testing shows that: (i) there is no difference in the service quality responsiveness received from either the council or the private operator, (ii) there is a difference in the service quality assurance received from the private operator compared to the services received from the council, (iii) there is no difference in terms of the service quality tangibility received from either the council or the private operator, (iv) there is a difference in the service quality empathy received from the private operator compared to the council, and (v) there is no difference in the service quality reliability received either from the council or the private operator.

### **5.3 Conclusion**

The discussion in this section is divided into the relationship of each independent variable to the dependent variable as stated in Chapter One.

### 5.3.1 Tangibility

Tangibility refers to the appearance of physical facilities, equipment, personnel and communication materials. It is being measured by the right waste collection vehicle, additional equipment to collect waste by the workers, the appropriate attire used by the workers to do their job of collecting domestic waste from each houses in the area.

There is no difference seen between expectation / pre-test (mean = 3.49, SD = .758) and perception / post-test (mean = 3.48, SD = .639) of the tangibility aspect of the service. Maybe because it is dealing with domestic waste collection that it the type of vehicle, equipment and workers' appearance does not matter much to the workers or residents.

The results of the paired T-test ( $t = .408$ ,  $p > 0.05$ ) is also not significant. This results confirms the results of the mean as mentioned earlier. The physical part of the service such as vehicle, equipment and workers' attire is not important to the customers and residents.

### 5.3.2 Reliability

Reliability is the ability to perform the promised services in a dependable, accurate and fully responsible manner. This is carried out without negligence and failure. The mean test results showed that there is not much different from the expectation / pre-test (mean = 3.59; SD = .707) and perception / post-test (mean = 3.57; SD = .613) which means that

the residents could accept the existing level of reliable service provided to them by the domestic waste collection contractors. However, the result of the paired T-test is insignificant ( $t = .450$ ;  $p > 0.05$ ). Thus the residents do not view providing reliable domestic waste collection is important. To date there has not been a situation the domestic waste were not collected for a long period that could create a real concern among the residents. It is high possibility that the domestic waste collection service is very reliable all these while that residents did not consider it as important.

### 5.3.3 Responsiveness

Responsiveness is the willingness to help customers or residents, provide prompt service and to respond quickly and immediately to the customers or residents' request. The results of the mean score between expectation / pre-test (mean = 2.46, SD = .732) and perception / post-test (mean = 2.52, SD = .635) is just a slight difference of .06. Residents do not expect a higher level of responsiveness from the domestic waste collection service providers. This is maybe due to the collection being done according to the schedule most of time by the service providers. However the result of the T-test showed that responsiveness is not significant factor to the residents. As mentioned earlier, as the service is being provided according to the schedule by the service providers may make residents do not feel responsiveness is significant to the service given and received.

#### 5.3.4 Empathy

Empathy refers to the ability of the service provider in providing individual attention to customers. The expectation / pre-test of customers (mean = 2.44, SD = .684) and the perception / post-test of customers (mean = 2.51, SD = .620) showed that the service received by customers is higher than what is expected.

#### 5.3.5 Assurance

Assurance involves both knowledge and courtesy of the employees and their ability to convey trust and confidence. Assurance is delivered through the employees' skilfulness in delivering the service, being courteous to the customers or residents, employees' ability to create confidence in customers or residents and employees' expertise in dealing to customers' or residents' questions.

There is a difference of .95 between expectation and pre-test (mean = 4.46, S = .732) and perception or post-test (mean = 3.51, SD = .616). The perception / post test results of the residents is much lesser than what they initially expect of the service. The level of confidence of the customers on the service provided is declining. Customers feel that the employees may lack of skill in dealing with customers or residents. The results of the paired T-test shows that assurance is significant ( $t = 4.060$ ,  $p < 0.05$ ). Thus customers or residents feel that the ability of the employees to have the skill to assure customers or residents of the service is lacking. The problem may arise because the domestic waste



collection service employees are mostly foreign workers. They may not be able to communicate or being told not to interact with the customers or residents while doing their job. However, assurance from the employees while delivering the service is considered important from the customers or residents' perspective

## **5.4 Recommendations**

The recommendations is divided into two main section, namely from the academic perspective and the managerial perspective.

### **5.4.1 Academically**

This study employs the SERVQUAL approach for a service where the consumers have less involvement during and after the service is conducted. The results show that the difference between expectation / pre-test and perception/post-test is very minimal. Therefore it is strongly suggested that the future study on domestic waste collection should employ different theory, concept or approach.

### **5.4.2 Managerially**

The results has indicated that even in the dirty related service, consumers still appreciate assurance and empathy from the employees or workers to interact with the consumers. In

general, consumers enjoy to be heard and therefore it will be beneficial to train the workers and employees how to interact with consumers when the need arises.



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## **APPENDIX**

### **Questionnaire**





**UUM Kuala Lumpur**  
Universiti Utara Malaysia

**KAJIAN KEPUASAN PELANGGAN KE ATAS KONTRAKTOR  
KUTIPAN SAMPAH DOMESTIK DI DAERAH BATU, MAJLIS  
DAERAH SELAYANG, SELANGOR**

***STUDY OF CUSTOMER SATISFACTION ON DOMESTIC WASTE  
COLLECTION CONTRACTOR'S SERVICES IN BATU DISTRICT, SELAYANG  
MUNICIPAL COUNCIL, SELANGOR***

Assalamualaikum dan Selamat Sejahtera  
Kajian ini dijalankan bagi tujuan akademik semata-mata. Kerjasama tuan/puan untuk mengisi soalselidik ini didahului dengan ucapan terima kasih.

*Assalamualaikum and Good Day  
This study is conducted purely for academic purposes. Your cooperation in filling-up this  
questionnaire is highly appreciated and thank you.*

Mohd Zikry  
MSc. (Management)  
UUM Kuala Lumpur

## **BAHAGIAN / SECTION A: LATARBELAKANG / BACKGROUND**

Sila tanda **X** dalam kotak yang bersesuaian/  
*Please mark **X** in the appropriate box.*

### **DEMOGRAFIK/ DEMOGRAPHIC**

Jantina/ *Gender*

- lelaki / *male*
- perempuan / *female*

Satusperkahwinan / *Marital status*

- bujang / *single*
- berkahwin / *married*
- ibubapatunggal / *single parent*

Umur/*Age*

- 17 kebawah / *17 and less*
- 18-29
- 30-39
- 40-49
- 50-59
- 60 keatas / *60 and above*

Pendidikan/*Education*

- Sekolah Menengah/*Secondary school*
- Sijil / *Certificate*
- Diploma / *Diploma*
- Sarjanamuda / *Bachelor*
- Sarjana / *Masters*
- Kedoktoran / *Doctorate*

Pendapatan isirumah/ *household income*

- RM1000 dan kurang / *RM1000 and less*
- RM1,001 – RM5,000
- RM5,001 – RM10,000
- RM10,001 – RM15,000
- RM15,001 dan keatas / *RM15,001 and above*





## BAHAGIAN B / SECTION B: HARAPAN / EXPECTATION

Sila baca kenyataan dan **BULATKAN** angka yang mewakili **HARAPAN** anda berdasarkan skala berikut:

*Please read the statement and **CIRCLE** the number that best reflects your expectation based on the following scale.*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Tidak memuaskan <i>Not satisfied</i>		sederhana moderate		Sangat Memuaskan <i>most satisfied</i>

### TANGIBILITY ( E1 – E4)

- E1 Kontraktor kutipan sampah domestik sepatutnya mempunyai peralatan terkini.  
*The domestic waste collection contractor should have up-to-date equipment.*

**1                      2                      3                      4                      5**

- E2 Kemudahan fizikal kontraktor kutipan sampah domestik sepatutnya selesa dipandang.  
*The physical facilities of the domestic waste collection contractor should be visually appealing.*

**1                      2                      3                      4                      5**

- E3 Pekerja kontraktor kutipan sampah domestik perlu berpakaian yang sesuai.  
Pakaian pekerja kontraktor kutipan sampah domestik sepatutnya bersesuaian.  
*The domestic waste collection contractor's workers should dress appropriately for the job.*

**1                      2                      3                      4                      5**

- E4 Kemudahan fizikal servis kutip sampah domestik sepatutnya sesuai dengan servis yang diberikan.  
*The appearance of the physical facilities of the domestic waste collection contractor should be appropriate with the service provided.*

**1                      2                      3                      4                      5**

### RELIABILITY ( E5 – E9 )

- E5 Apabila kontraktor kutipan sampah domestik berjanji untuk melakukan sesuatu, mereka sepatutnya melakukannya.  
*When the domestic waste collection contractor promises to collect domestic waste by a certain time, they should do it.*

**1                      2                      3                      4                      5**

- E6 Apabila pelanggan menghadapi masalah, kontraktor kutipan sampah domestic sepatutnya bersimpati dan meyakinkan.  
*When customers have problems, the domestic waste collection contractors should be sympathetic and reassuring.*
- 1            2            3            4            5**
- E7 Kontraktor kutipan sampah domestic sepatutnya boleh dipercayai.  
*The domestic waste collection contractor should be dependable.*
- 1            2            3            4            5**
- E8 Kontraktor kutipan sampah domestic sepatutnya menyediakan servis pada waktu dijanjikan.  
*The domestic waste collection contractor should provide the service at the time they promise to do so.*
- 1            2            3            4            5**
- E9 Jadual kutipan sampah kontraktor kutipan sampah domestic sepatutnya tepat.  
*The domestic waste collection contractor should keep their waste collection schedule accurately.*
- 1            2            3            4            5**
- RESPONSIVENESS ( E10 – E13)**
- E10 Kontraktor kutipan sampah domestic tidak perlu memaklumkan kepada pelanggan bila kutipan sampah domestik akan dilakukan.  
*The domestic waste collection contractor shouldn't be expected to tell customers exactly when the service will be performed.*
- 1            2            3            4            5**
- E11 Adalah tidak realistic untuk pelanggan mengharapkan servis segera dari pekerja kontraktor kutipan sampah domestik.  
*It is not realistic for customers to expect prompt service from the workers of the domestic waste collection contractor.*
- 1            2            3            4            5**
- E12 Pekerja contractor kutipan sampah domestic tidak perlu sentiasa bersedia membantu pelanggan.  
*The employees of domestic waste collection contractor don't always have to be willing to help customers.*
- 1            2            3            4            5**
- E13 Tidak menjadi masalah sekiranya pekerja kontraktor tidak menghiraukan permintaan pelanggan dengan segera kerana terlalu sibuk.  
*It is okay if the workers of the domestic waste collection contractor are too busy to respond to customer requests promptly.*
- 1            2            3            4            5**

**ASSURANCE (E14 – E17)**

- E14 Pekerja kontraktor kutipan sampah domestik sepatutnya boleh dipercayai oleh pelanggan  
Customers should be able to trust employees of the domestic waste collection contractor.  
1 2 3 4 5
- E15 Pelanggan sepatutnya rasa selamat bila berurusan dengan pekerja kontraktor kutipan sampah domestik.  
*Customers should be able to feel safe in their transactions with the domestic waste collection contractor's workers.*  
1 2 3 4 5
- E16 Pekerja kontraktor harus ramah dan berbudi Bahasa.  
*The contractor's employees should be polite.*  
1 2 3 4 5
- E17 Pekerja kontraktor perlu mendapat sokongan dari syarikat bila membuat kerja dengan baik.  
*The contractor's employees should get adequate support from their company to do their jobs well.*  
1 2 3 4 5

**EMPATHY ( E18 - E22 )**

- E18 Kontraktor tidak perlu memberi perhatian khusus kepada pelanggan.  
*The contractor should not be expected to give customers individual attention.*  
1 2 3 4 5
- E19 Pekerja kontraktor kutipan sampah domestik tidak perlu untuk memberi pelanggan perhatian khusus.  
*Employees of the domestic waste collection contractor cannot be expected to give customers personal attention.*  
1 2 3 4 5
- E20 Adalah tidak realistik untuk mengharap pekerja tahu apa yang diperlukan oleh pelanggan.  
*It is unrealistic to expect the workers to know what the needs of their customers are.*  
1 2 3 4 5
- E21 Adalah tidak realistik untuk mengharap kontraktor kutipan sampah domestik mengutamakan kepentingan pelanggan.  
*It is unrealistic to expect the domestic waste collection contractor to have their customers' best interest at heart.*  
1 2 3 4 5
- E22 Pelanggan tidak boleh mengharap kontraktor beroperasi mengikut kesesuaian masa semua pelanggan.  
*The domestic waste collection contractor shouldn't be expected to have operating hours convenient to all their customers.*  
1 2 3 4 5

## BAHAGIAN / SECTION C: PERSEPSI / PERCEPTION

Sila baca kenyataan dan **BULATKAN** angka yang mewakili persepsi anda berdasarkan skala berikut:

*Please read the statement and **CIRCLE** the number that best reflects your perception based on the following scale.*

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Tidak memuaskan <i>Not satisfied</i>		sederhana <i>moderate</i>		Sangat Memuaskan <i>most satisfied</i>

### TANGIBILITY ( P1 - P4 )

- P1 Servis kutipan sampah domestic mempunyai peralatan terkini.  
*The domestic waste collection contractor has up-to-date equipment.*
- 1                      2                      3                      4                      5
- P2 Kemudahan fizikal(jentera dan mesin) kontraktor kutipan sampah domestic sepatutnya selesa dipandang.  
*The domestic waste collection contractor physical facilities are visually appealing.*
- 1                      2                      3                      4                      5
- P3 Pekerja kontraktor kutipan sampah domestic berpakaian sesuai)  
*The domestic waste collection contractor's workers are well dress appropriately for the job.*
- 1                      2                      3                      4                      5
- P4 Kemudahan fizikal(jentera dan mesin) kontraktor kutipan sampah domestic adalah sesuai dengan servis yang diberikan.  
*The appearance of the domestic waste collection contractor's service physical facilities is appropriate with the service provided.*
- 1                      2                      3                      4                      5

### RELIABILITY ( P5 – P9 )

- P5 Kontraktor ktipan sampah domestic melaksanakan janji dan jadual yang telah di tetapkan.  
*When the domestic waste collection service contractor promises to collect domestic waste by a certain time, they should do it.*
- 1                      2                      3                      4                      5

P6 kontraktor kutipan sampah domestic memberikan simpati dan meyakinkan, apabila pelanggan menghadapi masalah,  
*When customers have problems, the domestic waste collection contractor is sympathetic and reassuring.*

1 2 3 4 5

P7 *Kontraktor kutipan sampah domestic boleh dipercayai*  
The domestic waste collection contractor is dependable.

1 2 3 4 5

P8 Kontraktor kutipan sampah domestic menyediakan servis pada waktu dijanjikan.  
The domestic waste collection contractor provides the service at the time they promise to do so.

1 2 3 4 5

P9 Jadual kutipan sampah kontraktor kutipan sampah domestic adalah tepat.  
The domestic waste collection contractor should keep their waste collection schedule accurately.

1 2 3 4 5

**RESPONSIVENESS ( P10 - P13)**

P10 Kontraktor kutipan sampah domestic tidak memaklumkan kepada pelanggan bila kutipan sampah domestik akan dilakukan.

*The domestic waste collection contractor shouldn't be expected to tell customers exactly when the domestic waste collection will be performed.*

1 2 3 4 5

P11 Anda tidak menerima servis segera dari pekerja kontraktor kutipan sampah domestik.  
*You do not receive prompt service from the workers of the domestic waste collection contractor.*

1 2 3 4 5

P12 Pekerja contractor kutipan sampah domestic tidak sentiasa bersedia membantu pelanggan.  
*The workers of domestic waste collection contractor are not always willing to help customers.*

1 2 3 4 5

P13 Pekerja kontraktor kutipan sampah rumah terlalu sibuk untuk melayani permintaan pelanggan dengan segera.

*Workers of the domestic waste collection contractor are too busy to respond to customer requests promptly.*

1 2 3 4 5

**ASSURANCE (P14-P17)**

P14 Anda boleh mempercayai pekerja kontraktor kutipan sampah domestik.  
*You can trust the workers of the domestic waste collection contractor.*

1 2 3 4 5

P15 Ada merasa selamat bila berurusan dengan pekerja kontraktor kutipan sampah domestik.  
*You feel safe in your transactions with the domestic waste collection contractor's workers.*

1 2 3 4 5

P16 Pekerja kontraktor adalah ramah.  
*The contractor's workers are polite.*

1 2 3 4 5

P17 Pekerja mendapat sokongan dari kontraktor bila membuat kerja dengan baik.  
*Workers get adequate support from the contractor to do their jobs well.*

1 2 3 4 5

**EMPATHY (P18-P22)**

P18 Kontraktor tidak memberikan anda perhatian khusus.  
*The contractor does not give customers individual attention.*

1 2 3 4 5

P19 Pekerja kontraktor kutipan sampah domestik tidak memberi pelanggan perhatian khusus.  
*Employees of the domestic waste collection contractor do not give customers personal attention.*

1 2 3 4 5

P20 Pekerja kontraktor tidak tahu keperluan pelanggan.  
*The contractor's workers do not know what you needs are.*

1 2 3 4 5

P21 Kontraktor kutipan sampah domestik tidak mengutamakan kepentingan pelanggan.  
*The domestic waste collection contractor does not have your best interest at heart.*

1 2 3 4 5

P22 Kontraktor tidak mempunyai masa beroperasi yang sesuai dengan semua pelanggan. The contractor does not have operating hours convenient to all their customers.

1 2 3 4 5

**Terima kasih atas kerjasama anda**  
***Thank you for your cooperation***