

# Public sector construction consultants in malaysia marketing essay

[Business](#), [Marketing](#)



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## **CHAPTER 1**

### **Assessing Service Quality Dimensions: A study on Public Sector Construction Consultants in Malaysia**

#### **1. 0Research Background**

Government has announced that RM49. 7 billion shall be allocated for  
Development Expenditure. in the 2013 budget. In line with the government's  
commitment to strive for its National Key Result Area and respective

Ministry's Key Performance Indicator, requirement of quality improvement towards construction project become a necessity. This is due to the current changing environment of customer expectation. The demands in terms of quality level and awareness have also increased. In current rapid environment, most of governments' construction projects have been outsourced to the consultants to be managed due to shortage of capacity to fulfil the current needs. Even the public works department has to outsource its project to the consultants. With no longer in house control, delivering the government projects is depending on how efficient in managing the consultants. One of the important preventive measures is to make an evaluation before selecting the consultants. In 2011, the government has made an improvement by tendering the selection of consultants. Tendering the consultants will enable more options and offers from the consultants as they need to compete in terms of price, design and value added services in order to be granted a project. An evaluation tool has been developed according to treasury guideline, however it was observed that service quality evaluation criteria need to be reassessed and differentiate the importance in order to be in line with current environments. Thus, this project shall seek to identify a set of service quality criterion relevant to the public sector construction consultant's requirements and propose a service quality evaluation tool for public sector construction consultants. This study will assess the consultant's service quality criteria through a survey of user experience of managing consultants in delivering public sector projects.

## **1. 1Research Problem**

SERVQUAL has been used widely in various service organizations and industries to measure service quality (Zekiri, 2011). According to ABI/Inform database " Global Edition", (September 1994) SERVQUAL has been a keyword in 41 publications which incorporate both theoretical discussions and applications of SERVQUAL in a variety of industrial, commercial and not-for-profit settings. Among all published studies mentioned, only one study is related to this research which is an architectural studies conducted by Baker and Lamb (1993) and one unpublished SERVQUAL study which is on construction related work (Buttle, 1995). Thus, based on observations, a research pertaining to construction industry that specifically focuses on consultants in public sector projects is rarely found especially in Malaysia. Additionally, there is no appropriate evaluation mechanism in place and has been used in Ministry of X to evaluate consultant service quality and basically the evaluation was conducted based on the feedback received from the technical staff who dealt directly with the consultants. Finally, there is no comprehensive tool that incorporated service quality elements and which has been developed in Ministry of X to evaluate the consultant in which at the same time aid in consultant selection.

## **1. 2Research Question**

The study proposes to assess service quality dimensions towards public sector construction consultants using SERVQUAL model, within a framework of specific research questions. The research question is as follows: 1. What

are the most important service quality criteria in selecting consultant for Ministry of X?

### **1. 3Research Objectives**

The objectives of this research are: 1. To establish a set of public sector consultants service quality evaluation criteria 2. To propose a service quality evaluation tool as an aid in selecting public sector construction consultants

### **1. 4Significance of the Research**

This study will help related government agency to evaluate the consultants effectively before selecting a consultant during tender evaluation process.

The information obtained from the evaluation results using the propose tool in this study will contribute as a valuable data and information in appointing consultants for a future project. This is because service quality carries certain weightage in consultant tendering evaluation process. The proposed tool will assist the respective person to evaluate consultant service quality based on actual conditions. In addition, the service quality criterion identified in this study will assist consultants in knowing and improving their service quality in order to have competitive advantage.

### **1. 5Research Scope**

The scope of this research is to distinguish service quality criterion for public sector project consultant according to one of the public sector terms of reference. This study will involve respondents from a public sector unit in one of the ministry which is involved directly in managing the consultants. The respondent will be at least at the engineers or executives level.

## CHAPTER 2

### Literature Review

#### 2.0 Definition of Quality

Quality is a key factor in which people distinguish whether the product or service received is good or not. Most of the people concern about quality aspects when dealing with money in which they paid either for the product or service. People expect to receive a good quality of product or service when they shop for grocery, dining in a restaurant, purchased goods such as television, computer, car and so forth. Generally, people define quality based on what they see and what is missing on a particular products or services. Therefore it creates a point that quality is in the eye of customer. Even though quality is easy to see and apparent when missing, quality actually is hard to pin down because comprehensive simplicity of quality challenges its explanation. Table 2. 1 exemplifies views on quality from several " Quality Gurus". (Nina, 2008) (David & Stanley, 2010)

#### Table 2. 1" Quality" from Quality Gurus' views

##### Quality Gurus (Quality Specialist)

##### Views on Quality

Dr. Barry Boehm Think of quality as " Achieving high levels of user satisfaction, portability, maintainability, robustness and fitness for use". Phil Crosby Quality means " conformance to user requirements". Edwards Deming Consider quality to be " striving for excellence in reliability and functions by continuous improvement in the process of development, supported by statistical analysis of the causes of failure". Kaoru

Ishikawa Defines quality as follows: Quality and customer satisfaction are the same thing. Quality is a broad concept that goes beyond just product quality to also include the quality of people, processes and every other aspects in organization.

Joseph M. Juran's two definitions of quality: Product features that meet customer needs. Freedom from deficiencies.

In addition, Boeing defines quality as " providing our customers with products and services that consistently meets their needs and expectations" while CEO of Federal Express, Fred Smith defines quality as " performance to the standard expected by the customer".

General Services Administration (GSA) on the other hand defined quality as " meeting the customer's needs the first time and every time".

Finally, the U. S. Department of Defense (DOD) defined quality as " doing the right thing right the first time, always striving for improvement, and always satisfying the customer". (David & Stanley, 2010)

There is no universal accepted definition on quality because different people perceived different definition of quality. Therefore, quality is heterogeneous. However, similarity among definitions does exist. The first similarity is quality involves meeting or exceeding customer expectations. Secondly, quality applies to product, services, people, processes and environments. Finally, quality is an ever-changing state in which what is considered quality today may not be good enough to be considered quality tomorrow. In conclusion, quality can be define as a dynamic state associated with products, services, people, processes and environments that meets or exceeds expectations and helps produce superior value. (David & Stanley, 2010)

## **2. 1Definition of Service Quality**

Service quality is one popular subject discussed among clients of all kinds of services especially among practitioners and researchers. Most practitioners believe that service quality has effect on bottom-line performance of firms (Albert, 2000). Service quality is a result of the comparison customers make between their expectations a service and their perceptions of the way service has been performed (Lewis and Booms, 1983; Lehtinen and Lehtinen, 1982; Grönroos, 1984; Parasuraman et al., 1985, 1988, 1994; Caruana, 2002). Service quality is defined by Parasuraman et al. (1985) as the degree of discrepancy between customers' normative expectations of service and their perceptions of service performance. Parasuraman et al. (1985) also defined service quality as the degree of discrepancy between customers' normative expectation for service and their perceptions of service performance. According to Patric, Karl and John (1996), service quality is perceived as global judgment or attitude related to the superiority of service. Basically, service quality theory (Oliver, 1980) assumes customer rating is based on expectations of customers. Customers rate quality as low if the service performance does not meet their expectations. Similarly, quality rating increases as performance exceeds their expectations. Therefore, it can be said that service quality evaluation is mainly based customers' expectations. There is a correlation between service quality and customer expectations as service quality increases, service satisfaction and intentions to reuse the service will consequently increase (Patric, Karl and John, 1996). On the same note, service quality has a three-dimensional view which consists of " interaction", " physical" and " corporate" quality (Lehtinen and



Lehtinen (1982). " Interactive service quality" refers to the two-way flow that occurs between the customer and the service provider - that includes automated and animated interactions. Similarly, " physical service quality" refers to the tangible aspects of the service while " corporate service quality" refers to the service provider image characteristics provided by its customers and publics. However so, corporate service quality is more stable compared to interactive quality and physical quality (Gi-Du, Jeffrey, 2004). However, from the customers' perspective, service quality has a two-dimensional view which consists of " output" and " process" service quality. Output service quality is also known as " technical" service quality while process service quality is also known as " functional" service quality. In the model proposed by Grönroos (1984, 1990), technical service quality refers to what is delivered to the customer while functional service quality refers to how the end result of the process is transferred to the customer. Functional service quality consists of both psychological and behavioral aspects which include the availability of the provider, how service employees perform their tasks, what they say and how the service is conducted. Thus, functional service quality is subject to evaluation compared to technical service quality which can be objectively evaluated. In addition, a model proposed by Grönroos (1984, 1990) also recognizes that there is a correlation between customer service in relation to quality impact as customers reflect a certain portion of a firms' image or reputation. Thus, Albert (2000) reaffirms model put forth by Grönroos (1984, 1990) that a firm's established image also depends on customer perceived service quality (results of customer evaluation of what they expect and what they experience). Table 2. 2 below

summarizes the key definitions on service quality given by Parasuraman et al., Lehtinen and Lehtinen, and Grönroos.

## **Table 2. 2Key Definitions on Service Quality**

### **SERVICE QUALITY**

#### **By**

#### **Definition**

Parasuraman et al. (1985, 1988, 1994)The degree of discrepancy between customers' normative expectation for service and their perceptions of service performance (Patric, Karl and John, 1996). The ability of the organization to meet or exceed customer expectations. Customer expectations may be defined as the " desires and wants of consumers" (George and Shirley, 1996). Lehtinen and Lehtinen (1982)Service quality consists of " interaction", " physical" and " corporate" quality (Gi-Du, Jeffrey, 2004). Interactive quality: a two-way flow that occurs between the customer and the service provider wherein includes automated and animated interactions. Physical quality: tangible aspects of the serviceCorporate quality: Service provider image characteristics provided by its customers and the public. Grönroos (1984, 1990)Service quality from customer's perspective: a two-dimensional view which consists of " output (technical)" and " process (functional)" quality. Technical quality: what is delivered to the customerFunctional quality: how the end result of the process is s transferred to the customer

## **2. 2SERVQUAL Model on Service Quality**

The SERVQUAL model on a service quality is one of the most widely used instruments to measure service quality which was developed by Berry, Parasuraman and Zeithaml in 1985 (Brown et al., 1996, in Buttle, 1996). SERVQUAL is widely adopted to explain a customer's perception of service as this model is essentially based on the perception gap between the received service quality and the expected service quality (K. Ravichandran, S. Prabhakaran and S. Arun, 2010). Parasuraman et al. (1988) states that "SERVQUAL instrument is used in a broad set of service business and provides a basic skeleton through its expectations/perceptions format encompassing statements for each of the five service quality dimensions. The skeleton, when necessary, can be adapted or supplemented to fit the characteristics or specific research needs of a particular organization. A number of potential applications for the SERVQUAL model have been identified by Parasuraman et al. (1988) as listed in Table 2. 3.

### **Table 2. 3Potential Applications for SERVQUAL model by Parasuraman et al., 1988**

#### **Potential Applications identified by Parasuraman et al. (1988) for the SERVQUAL model**

1. Can be used on a regular basis to track customer perceptions of service quality of a particular firm compared to its competitors.
2. Provides the opportunity for a firm to assess its service quality performance on the basis of each dimension individually as well as the overall dimensions.
3. Allows the firm to classify its customers into different segments based on their individual SERVQUAL scores.
4. Allows multi-unit retail companies to assess

the level of service quality offered by individual stores and to group them into different sectors with different quality images. Originally, SERVQUAL model formulation developed by Parasuraman et al. (1985) consists of ten components of Service Quality (Buttle, 1995). In 1988, such formulation has been modified through an empirical test of five components of Service Quality (Haksik, Yongki and Dongkeun, 2000) as described in Table 2. 4.

## **Table 2. 4Service Quality Components by Parasuramanan et al., 1985 & 1988**

### **List of Service Quality Components developed by Parasuraman et al.**

#### **In 1985**

#### **Modification in 1988**

1. ReliabilityReliability2. ResponsivenessResponsiveness3.

TangiblesTangibles4. CompetenceAssurance5. AccessEmpathy6. Courtesy7.

Communication8. Credibility9. Security10. Understanding/knowing the

customerFundamentally, from a modification of ten components proposed in

1985 to five components in 1988, three components remain distinct which

are reliability, responsiveness and tangibles but the remaining seven

components collapse into two aggregate dimensions which are assurance

and empathy (Buttle, 1995).

## **Table 2. 5SERVQUAL Components by Parasuraman et al., 1988 (in Buttle, 1995)**

### **SERVQUAL Components**

#### **Definition**

ReliabilityThe ability to perform the promised service dependably and

accuratelyResponsivenessThe willingness to help customers and provide

prompt serviceTangiblesThe appearance of physical facilities, equipment,

personnel and communication materialsAssuranceThe knowledge and

courtesy of employees and their ability to convey trust and

confidenceEmpathyThe provision of caring, individualized attention to

customersIn 1991, based on the result of an empirical study on five

companies, Parasuraman et al. (1991) has revised the SERVQUAL model. The

differences between the original version and the revised version are as

stated in Table 2. 6.

## **Table 2. 6 Differences between Original and Revised Versions of SERVQUAL (Haksik, Yongki and Dongkeun, 2000)**

### **Original Version of SERVQUAL model**

**Parasuraman et al., Berry and Zeithaml (1985 & 1988) and Buttle (1995)**

### **Revised Version of SERVQUAL model**

**Parasuraman et al., Berry and Zeithaml (1991) and Buttle (1995)**

Different wordings are adopted to replace " should" terminology which has contributed to unrealistically high expectation scores. Example of statement in original version:" Telephone companies should keep their records accurately" Revised wordings focus on what customers would expect from companies delivering excellent services. Example of statement in revised version:" Excellent telephone companies will insist on error-free records"

Negative worded items are used. The negatively-worded items are all changed to a positive format. Initially - tangible items: 1) The appearance of the physical facilities of telephone companies should be in keeping with the type of services provided. Initially - assurance item: 2) Telephone company employees should get adequate support from their companies to do their jobs well. Revised - tangible items: 1) Material associated with the services (such as pamphlets or statements) will be visually appealing in an excellent telephone company. Revised - assurance item: 2) Employees in excellent telephone companies will have the knowledge to answer customer questions. In brief, it can be said that Parasuraman et al., Berry and Zeithaml (1985,

1988, and 1991) contributed in rendering service quality to be continuously relevant and significant for over a quarter of a century even though they received numerous criticisms against their SERVQUAL model.

## **2.3 Customer Satisfaction**

According to Grönroos (2001), most customers bring their past experiences and overall perceptions of a particular service firm to each encounter as they have always had continuous contact with the same service firm. Thus, customers contribute in terms of relating service firms images based on service that they received from service providers. Nevertheless, customer satisfaction is a result of a series of service transactions. Customers' opinions on service received and service provider is generally referred as the perceived quality of the service in which the service provider plays an integral role (Lovelock, Patterson & Walker, 2004). Perceived quality can be defined as a global judgment or attitude related to the superiority of the service while satisfaction is related to a specific transaction (Parasuraman et al., 1988). On the other hand, Lam & Burton (2006) mention that customer satisfaction has often been recommended to be the leading determinant of loyalty. (Lo Liang, Osman Mahamad, T. Ramayah & Rahim, 2010). Oliver (1981) introduced an Expectancy-Disconfirmation model used to study customer satisfaction as found in the retail and service industry. This theory suggests that customer satisfaction is a result of subjective (or direct) comparisons between customers' expectations and perceptions towards a target product or service. The scale "worse than/better than expected" is used when customers are being asked to provide their evaluations of such

comparisons. In the same light, results of perceptions are theorized as a physiological concept called " subjective disconfirmation" (Haemoon, 1999). Similarly, the Expectancy-Disconfirmation model emphasizes how customer satisfaction is a direct function of subjective disconfirmation in which the level of satisfaction relatively determines size and direction of disconfirmation. Inevitably, customer " confirmation" takes place in which customer will insist that they are neither satisfied nor dissatisfied. However so, Churchill and Surprenant (1982) contends that expectations and perceptions influence customer satisfaction and subjective disconfirmation under various circumstances (Haemoon, 1999). Nevertheless, the consensus between all researchers on what creates satisfaction is absent. Therefore, it is difficult to construct instruments for satisfaction measurement as there is no universally-accepted definition on customer satisfaction either in conceptual or in operational aspects. As such, a research conducted by Giese and Cote (2000) review the literature on satisfaction literature by interviewing a group of people and company personnel. As a result, Giese and Cote (2000) define customer as the ultimate user of a product (Albert, 2000). Fundamentally, Giese and Cote (2000) suggests three general components that construct the Customer Satisfaction Theory as illustrated in Table 2. 7.



## **Table 2. 7 Constructs of the Customer Satisfaction Theory**

### **Three Constructs of the Customer Satisfaction Theory by Giese and Cote (2000)**

#### **1**

Customer satisfaction is a summary-affective response that varies in intensity.

#### **2**

Response pertains to a particular focus (product choice, purchase or consumption).

#### **3**

Response occurs at a particular time but varies by situation (generally limited in duration). Giese and Cote (2000) advocate that three constructs provide the basis specifically meant for operational definitions. They define customer satisfaction as " A summary- affective response of varying intensity with a time-specific point of determination and limited duration and this is directed towards the focal aspects of product acquisition and/or consumption" (Albert, 2000). In the context of this study, the customer is referred as the Ministry of X. As such, customer satisfaction acts as the mediator between service quality and consultant selection. As a result, this study revises a theoretical model from Agus et al. (2007) and that of Caruana (2002) which illustrates the relationship between this research subject and that of customer satisfaction and service quality (as stated in Figure 1. 0).

## **Figure 1. 0Research Theoretical Model – Original and Revised Version**

TangiblesReliabilityResponsivenessEmpathyAssuranceCustomer Satisfaction

### **Customer Loyalty**

TangiblesReliabilityResponsivenessEmpathyAssuranceCustomer Satisfaction

### **Consultant Selection**

## **Theoretical Model by Agus et al. (2007) and Caruana (2002)**

### **Revised Model according to the research subject**

## **2. 4Terms of Reference (ToR) used in the Ministry of X, 2009.**

Generally an agreement between the service provider (in this context, a consultant) and the customer (Ministry of X) requires a Memorandum of Agreement (MoA) to officially launch a project. Specifically in the construction industry, according to the Scale of Fees (Revised, 1998) P. U. (B) 548, the "Memorandum of Agreement" (MoA) means the Memorandum of Agreement entered upon between the client and the consulting engineer in relation to the provisions of professional services for the work". In the Memorandum of Agreement (MoA), the consultant must provide services according to the client's requirements which have been clearly defined in a document called the 'Terms of Reference (ToR)'. In the Ministry of X, the consultant must deliver services according to details stated in the 'Terms of Reference, the Ministry of X, 2009'. Usually, the Terms of Reference (ToR) is bound together in a Memorandum of Agreement (MoA). Most of the time, different organizations will have different Terms of Reference (ToR)

according to their specific preferences. For the purpose of this study, the ‘ Scope of Consultancy Services’ and ‘ Consultant Duties and Responsibilities’ that relate to service quality perspective have been extracted from the ‘ Terms of Reference, Ministry of X, 2009’ to be used as the research basis. As such, the Scope of Consultancy Services contains a list of required services that an appointed consultant may agree to provide. On the other hand, Consultant Duties and Responsibilities is actually a customer’s expectation, in this case, the Ministry of X’s expectations. Required services that the consultant agrees to provide to the Ministry of X are as listed in Table 2. 8 while the Ministry of X’s expectations (customer expectations) towards the appointed consultant are as listed in Table 2. 9.

## **Table 2. 8 Required Services agreed to be provided to the Ministry of X by Consultant**

### **Required Services**

**1**

To advise on the best and economical design

**2**

To carry out preliminary site appraisal and design reports

**3**

To supplement, verify and clarify necessary data required by Authorities and Departments (e. g. : utility services, etc.)

#### **4**

To carry out site inspection, assessment and measure drawing works when required

#### **5**

To develop projects that include present and future plans if required by client

#### **6**

To develop, prepare and submit drawings and documents based on requirements for building approval and complete working drawings for all works and services

#### **7**

To act as the coordinator between the Ministry X and Local Authorities/Statutory Bodies personnel, workforce or contractors for all works including works outside boundaries

#### **8**

To prepare cost plans, cost estimates, tender and contract documentation adopting relevant JKR specification

#### **9**

To prepare, evaluate tenders and make any recommendations

#### **10**

To manage, administer and supervise the physical, financial and contractual aspects of the project

**11**

To obtain various approvals or permits for occupation and to accept buildings on behalf of the Ministry of X

**12**

To provide suitable and qualified candidates to supervise and monitor projects according to the purpose of the site

**Table 2. 9The Ministry of X's Expectations towards Appointed Consultant****The Ministry of X's Expectations (Customer Expectations)****1**

To perform work according to code of ethics of respective Professional Institutions and Boards

**2**

To execute duties and responsibilities with due care, reasonable standard skills, dilligence and efficiency

**3**

Shall at all times act in a manner protecting the government's interests

**4**

Consultants have to take responsibility if found to be committing acts that will increase the cost of the projects

**5**

Consultants must avoid being a party contributing, in whole or in part, to any form of delay or inaction during administration of the contract resulting in the eventual completion delay of the project

**Table 2. 9 Ministry of X's expectations towards appointed Consultant****Ministry of X's Expectations (Customer Expectations)****1**

To perform work according to code of ethics of respective Professional Institutions and Boards

**2**

To execute duties and responsibility with due care, reasonable standard skill, diligence and efficiency

**3**

Shall all times act in a manner to protect the government interest

**4**

Consultants to take responsibility if be found of committing acts that will increase cost of the projects

**5**

Consultants must avoid being a party contributing, in whole or in part, to any form of delay or inaction during administration of the contract resulting in the eventual completion delay of the project

## CHAPTER 3

### Research Methodology

#### 3.0 Introduction

This chapter aims to provide an overview of methodological approaches in conducting a purpose survey on assessing the service quality criteria of public sector construction consultants. In this chapter, a clear description on how the survey will be conducted was explained. There are 5 stages of main processes involve in conducting this survey which start with the initial study of the overall survey followed by the selection of case study and combination from the selection of service quality criteria according to SERVQUAL model and Ministry of X term of reference (TOR). Next, it will be the construct and distribute research instrument stage where questionnaires will be distributed to the selected respondents in order to evaluate user experience of service quality in dealing with public sector construction consultants based on the case study selected. The next stage is data collection stage where all completed questionnaires will be collected by hand or via mail. Finally, the analysis through literature review as well as through surveys that will be conducted in public sector from targeted respondents, namely, the engineer or executive level and above who involve directly with the consultants. Based on the data analysis, the researcher should be able to distinguish public sector construction consultants' service quality criteria and its weightage of the criteria that provide valuable inputs in developing the evaluation tool. The research methodology used was represented in Figure 3.

1Pilot study on questionnaire that been constructBaseline

questionnaireAssessing Service Quality Dimensions: A Study on Public Sector

<https://assignbuster.com/public-sector-construction-consultants-in-malaysia-marketing-essay/>

Construction Consultants in Malaysia  
Initial Study  
Selection of case study,  
SERVQUAL model & Ministry of X TOR  
Research Proposal  
Initial study on  
overview of research  
Research background, questions, objectives, scope and  
significant of the research  
Construct and distribute research  
instrument  
Construct questionnaire based on: 1. SERVQUAL criteria identified  
2. Ministry X TOR  
Review on various examples of questionnaire in the  
internet  
Data collection  
Distribute questionnaire among valid or targeted  
respondents  
Completed questionnaire  
Collect completed questionnaire from  
respondents via emails and by hand  
Books and journals related to service  
quality, SERVQUAL and Ministry X TOR  
Detail study on SERVQUAL dimensions  
and Ministry X TOR  
1. List of SERVQUAL dimensions  
2. List of service quality  
criteria for Ministry X  
Data analysis  
Analysis results  
Analysis on all completed  
questionnaire using SPSS tool  
Service quality evaluation tool for Ministry  
X  
Develop evaluation tool to evaluate consultant service quality in Ministry  
X  
Report writing

### **Figure 3. 1 Research Methodology Flowchart Diagram**

#### **3. 1 Research Design**

Research design is important in conducting a research as it is actually a blueprint for every research. According to Sekaran (2003), research design is the only way that requisite data can be gathered and analyzed to arrive at the solution. Basically, research design lay down the details of procedures that are necessary in order to obtain required information to structure and solve the research problem. In conducting a research on service quality dimensions towards public sector construction consultants using SERVQUAL



model, a strong basic background on service quality dimensions generally and SERVQUAL model specifically is essential in order to distinguish public sector consultants' service quality evaluation criteria in which subsequently will be an input to develop an evaluation tool which act as an aid in selecting public sector construction consultants. Purposive sampling will be used as a method in order to collect data for this research. According to Ma. Dolores C. Tongco. (2007), purposive sample is an information selection tool commonly used in ethnobotany studies but lack of information involving studies in other areas. Purposive sample also known as judgment sampling method. The sampling method is focusing on specific respondents in an area or clusters which is a non-random technique. The researcher will decides the objective of the study and select the group of respondents that have the knowledge or experience in a specific area (experience (Bernard 2002, Lewis & Sheppard 2006). Purposive sampling is especially exemplified through the key informant technique (Bernard 2002, Garcia 2006, Gustad et al. 2004, Jarvis et al. 2004, Lyon & Hardesty 2005, Ma. Dolores C. Tongco, 2007). The respondents for this research will be selected among people who worked in the Ministry of X and dealt with the construction consultants regularly towards Ministry of X development projects. According to Zhang and Dran (2000), it is particularly effective when respondents are experienced. The researcher will sets the criteria of only engineers, executives and management level who can be the respondents for this research. The main reason of setting out these criteria is to obtain accurate and quality data from the respondents and minimize the arguments of perspective survey as the difference in working level can create different perspective.

### **3. 2Research Instruments**

Questionnaire will be used as a research instruments in this research.

Basically, questionnaire is the most frequently instruments for quantitative studies especially surveys. Furthermore, questionnaire is the best data collection tool to be used when dealing with a large sample as the data collected from a large sample can be analysed easily and in a structured manner (Kee-Luen, Seng-Fook and Thiam-Yong, 2012). Apart from that, questionnaire technique is flexible as questionnaire could be used in structured interviews, telephone interviews or could be self-administered in which the interviewer is not present. Besides that, questionnaire technique is a good approach to reach the respondents within a short period of time but researcher should be well-planned. The response collected also could be considered objective as all the respondents answer the same set of questions (Kee-Luen, Seng-Fook and Thiam-Yong, 2012). According to Zikmund (2003), a good questionnaire should satisfy two criteria which are relevancy and accuracy. A questionnaire can be labelled as relevant when there is no unnecessary information is collected and the data collected is sufficient to answer the research question. On the other hand, a questionnaire could be classified as accurate when the response are reliable and valid (Kee-Luen, Seng-Fook and Thiam-Yong, 2012). Subsequently, according to Cooper and Schindler (2006), a questionnaire should contain three types of questions which are administrative, classification and target questions. Basically, administrative questionnaire will help to identify the interviewer, the respondent, the interview location and condition where the questionnaires are administered. While classification questionnaire will

collect demographic information such as age, gender, race, etc. of the respondents. American researcher advised to put this type of questions at the end of the questionnaire due to the sensitive nature of the questions. However in Malaysia, people do not mind to answer this type of questions in the beginning of interview and in fact be preferred to be asked first so that the respondents could be screened. Among this three type of questions, target questions is the most important questions as the resulting responses should provide answers to the research questions (Kee-Luen, Seng-Fook and Thiam-Yong, 2012).

### **Table 3. 1 Three Types of Questions in Questionnaire by Cooper and Schindler (2006)**

#### **Types of Questions**

##### **Description**

**Administrative**To identify the interviewer, the respondent, the interview location and condition where the questionnaires are administered.

**Classification**Collect information on the demographics. **Target Questions**The resulting responses should provide answers to the research questions.

Additionally, as suggested by Saunders et al. (2003), there are three ways to design target questions. First, adopt questions used in other established questionnaires. Second, adapt questions used in other questionnaires and third, design new questions. Finally, Saunders et al. (2003) mentioned that adopting and adapting questions ensured high probability that the terms used in the questions are familiar, easy to understand and respond to. As a

result, the validity of the questionnaire could be improved (Kee-Luen, Seng-Fook and Thiam-Yong, 2012).

### **3.3 Data Collection**

There are three stages involved in data collection process as described in Figure 3. 2

#### **Stage 1**

#### **CONSTRUCT QUESTIONNAIRES**

#### **Stage 2**

#### **PILOT STUDY**

#### **Stage 3**

#### **DISTRIBUTE QUESTIONNAIRES**

#### **Figure 3. 2 Data Collection Process**

Before conducting a survey, a questionnaire will be constructed based on examples as guidelines provided by other researchers. There are two main section of the questionnaire involves which are General Information and User Experience towards public sector construction consultants service quality in Ministry of X section. Next, a pilot study will be conducted before embarking the questionnaires. The questionnaires survey will be given to a group of engineers in Ministry of X who dealt directly with construction consultants. According to Monette et al. (1997), prior to the data collection, a pilot study is conducted to ensure the reliability of the instruments used. Therefore, the objective of having a pilot study as one of the processes in data collection is to ensure the reliability and the significance of the question asked, in which

feedback was given by them on some questions and instructions used in the questionnaire survey. After completing the pilot study, the self-administered questionnaire will be distributed to the respondents. The survey used a paper-based survey as well as attachments in the emails of selected respondents. Approximately, 30 questionnaire will be distribute to a group of people working in technical unit in Ministry of X consists of engineers, executives and management level.

### **3. 4Data Analysis**

In the analysis part, the statistical named Statistical Package for Social Science (SPSS) version 15. 0 was used as an analysis tool. Firstly, data will be keyed in on the SPSS worksheet. After that, the analyzing steps will begin (Affiaine and Zalina, 2008). Basically, SPSS program provides an easy task for researchers in evaluating and managing information gathered from primary data. Finally, SPSS provide a lot of useful statistical tools for evaluating data in testing the study hypothesis (Affiaine and Zalina, 2008).