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# IMPROVING THE PROCESS OF CAPTURING CLIENTS' NEEDS


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A capstone project report submitted in partial fulfilment of the  
requirements for the award of the degree of  
Master of Project management

Faculty of Civil Engineering  
Universiti Teknologi Malaysia

DECEMBER 2010

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Date : **9 December 2010**

*Especially dedicated to:*

*My beloved mother, Rokiah Md. Zain*

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## **ABSTRACT**

Understanding of customer's need is very crucial for any organisation to ensure that their need can be fully realised. Therefore, it is important for organisation to have a systematic approach to capture their client requirements. For Jabatan Kerja Raya (JKR) this system has been developed and implemented in 2000 with the guidance of quality management system. However, based on the recent internal survey conducted in 2009, it is found that Customer Satisfaction Index achieved by JKR under the criteria of quality design is below the expectation. This has raised the alarm for JKR to review back their back their business process related to the addressing their client's need so that significance improvement can be made. This study is embarked on in conjunction with such effort. The main focus of this study is to propose improvement measure for JKR to reappraise their current process in understanding and translating client requirements into design outputs. The methodologies used for the study include thorough document search, interview with expert panels and questionnaire survey. The data collection involved JKR personnel as well as client form various government agencies in Malaysia. The findings from the study clearly indicate that some limitations existed within the current processes that need to be improved if JKR want to achieve the target of exceeding their client's satisfaction. Various improvement measures have been identified in this study and proposed to JKR. Among the improvement measures are the need for JKR to conduct benchmarking procedures, establish clear guidelines for the project team and adequate client representation in design development process. Finally, the study concluded that JKR must take a very serious action to realign their current process of addressing the client's needs coherent with the current business trend aspiration.

## ABSTRAK

Memahami kehendak pelanggan adalah sangat penting untuk memastikan bahawa keperluan mereka dapat dipenuhi. Oleh itu, adalah penting sesuatu organisasi mempunyai kaedah yang sistematik untuk mengumpul, memahami, menganalisa dan merealisasi keperluan pelanggan. Bagi Jabatan Kerja Raya, system pengurusan kualiti telah di diaplikasi dan digunapakai sejak 2000. Walau bagaimanapun, berdasarkan kepada kajiselidek dalaman yang dijalankan pada 2009, adalah didapati Index Kepuasan Pelanggan yang dicapai oleh JKR bagi kriteria reka bentuk berkualiti berada di bawah paras jangkaan. Ini adalah sesuatu yang amat membimbangkan kepada JKR supaya mengkaji semula proses dalaman berkaitan dengan keperluan pelanggan supaya penambahbaikan dapat dijalankan. Kajian ini dijalankan berdasarkan kepada usaha tersebut. Fokus utama kajian ini adalah untuk mencadangkan kepada JKR kaedah penambahbaikan bagi menilai semula proses sedia ada pengumpulan, pemahaman, penganalisaan dan merealisasi keperluan pelanggan kepada output reka bentuk. Kaedah pengumpulan data yang dijalankan untuk kajian ini adalah melalui kajian litertur, temuabual dengan pakar dan kajiselidek. Pengumpulan data ini dijalankan ke atas pegawai JKR dan pelanggan JKR yang terdiri daripada pelbagai agensi kerajaan. Hasil kajian menunjukkan terdapat masalah dan kekurangan semasa proses dijalankan yang perlu di perbaiki sekiranya JKR hendak mencapai objektif melepasi kepuasan pelanggan. Pelbagai kaedah penambahbaikan telah dikenalpasti di dalam kajian ini dan dicadangkan kepada JKR. Antaranya yang perlu dilaksanakan oleh JKR adalah prosedur penandas, garis panduan yang jelas untuk pasukan projek dan penglibatan pelanggan yang mencukupi semasa proses membangunkan reka bentuk. Akhirnya, kajian ini merumuskan bahawa JKR hendaklah mengambil langkah yang tegas untuk menastikan proses sedia ada dalam menangani keperluan pelanggan selari dengan halatuju JKR .



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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

In the last few decades, the focus on client or customer satisfaction has increased in all areas of industry, especially in increasing competitive and dynamic environment; the customers determine the survival of all organisations. For private sectors, customer satisfaction is an effective way to differentiate them from the competitors. Great expectation in accountability to stakeholders in public sector requires customer satisfaction to be factored in together with quality service, productivity, increase efficiency and effectiveness in government operations (Hood, 1995).

Organisation's policies, processes and procedures that reduce or eliminate non-conformances to provide quality product or services, quality management systems (QMSs) ensured by the organisation are customer driven. It is the customer who is the source of standards for defining quality. With the intention of promoting the application of QMSs to encourage competitiveness and economic growth, customer satisfaction index is used an indicator to measure the performance of the organisation from customer's perspective.



## 1.2 Problem Statement

Jabatan Kerja Raya (JKR) as one of public organization in Malaysia which implement national infrastructure project became customer focus organisation when it acquired MS ISO 9001 certification in 2000. Although the process of clients' needs are usually defined and determined during planning and design phases which is based on JKR MS ISO 9000: Manual Operating Procedure, JKR project teams still unable to satisfy client's need. Under quality attribute, JKR was ranked "less satisfaction" or moderate by it clients during planning and design phases; score of 62.2% of Client Satisfaction Index (CSI) for questionnaire survey on 'conceptual design proposal submitted to client fulfil standard' and 'JKR design meets the function and performance as required by client obtain score of 64.3% (Laporan Pengukuran Tahap kepuasan Pelanggan Bagi JKR 2009). Design changes during construction become norms that affect both clients and JKR. Clients were unable to move into their project as scheduled and at extra cost. To JKR, the changes incurred additional resources and time required to perform the changes, and also they affected client' satisfaction and loyalty. One of the reasons is due to current process does not have a guideline that helps the team members to capture the client's need. According to Dikmen *et. al.* (2005) the organisation needs a most effective and structured tool to deal with clients' demands systematically while establishing what they want.

## 1.3 Importance of Study

It is very significant to carry out the study in identifying with JKR's clients' needs base on QMSs' client satisfaction focus. It will assist JKR in managing client's needs systematically and accurately. Although satisfying client indicate how the clients measure JKR throughout its operational quality process which consists of five phases; planning, design, procurement, construction and handing over, clients' needs are usually briefed and defined during project planning and the needs are further clarified during design stages. Subsequently, this study is able to assist designer about what and how to capture client's need. In addition, constraint in funding for

new development project for 10<sup>th</sup> Malaysian Plan announced by the Malaysian government (Economic Planning Unit, 2009), JKR must improve its product and service with the purpose of providing quality projects for public facilities.

#### **1.4 The Aim and Objectives**

The main aim of this study is to propose mitigation measures to improve the current process of capturing clients' needs for the JKR project managers and designers with the purpose of achieving clients' satisfaction. The objectives of this study are as follows:

- a) To investigate the process of capturing client's requirements in JKR during planning and design phases;
- b) To identify the problems and limitation of the current process of capturing client's needs in JKR during planning and design phases; and
- c) To identify best mitigation measures to improve the current process of capturing client's requirements in JKR during planning and design phases.

#### **1.5 Scope of Study and Limitation**

The study is confined to processes undertaken by the designer, namely the architect and JKR project managers as the forerunners in building project. The project phases are limited to planning and design stages where capturing and translating clients' need occur. Furthermore, the clients being examined are restricted to ministries and government agencies/department that manage the development of their projects.

## 1.6 Brief Research Methodology

The methodology of this study started from identifying the problem statement; literature review; collecting data from literature review, semi-structured interviews and questionnaire survey; analysis of results; discussion result; conclusion and recommendations. A flowchart of the research methodology in order to achieve the objectives of the study as shown in Figure 1:

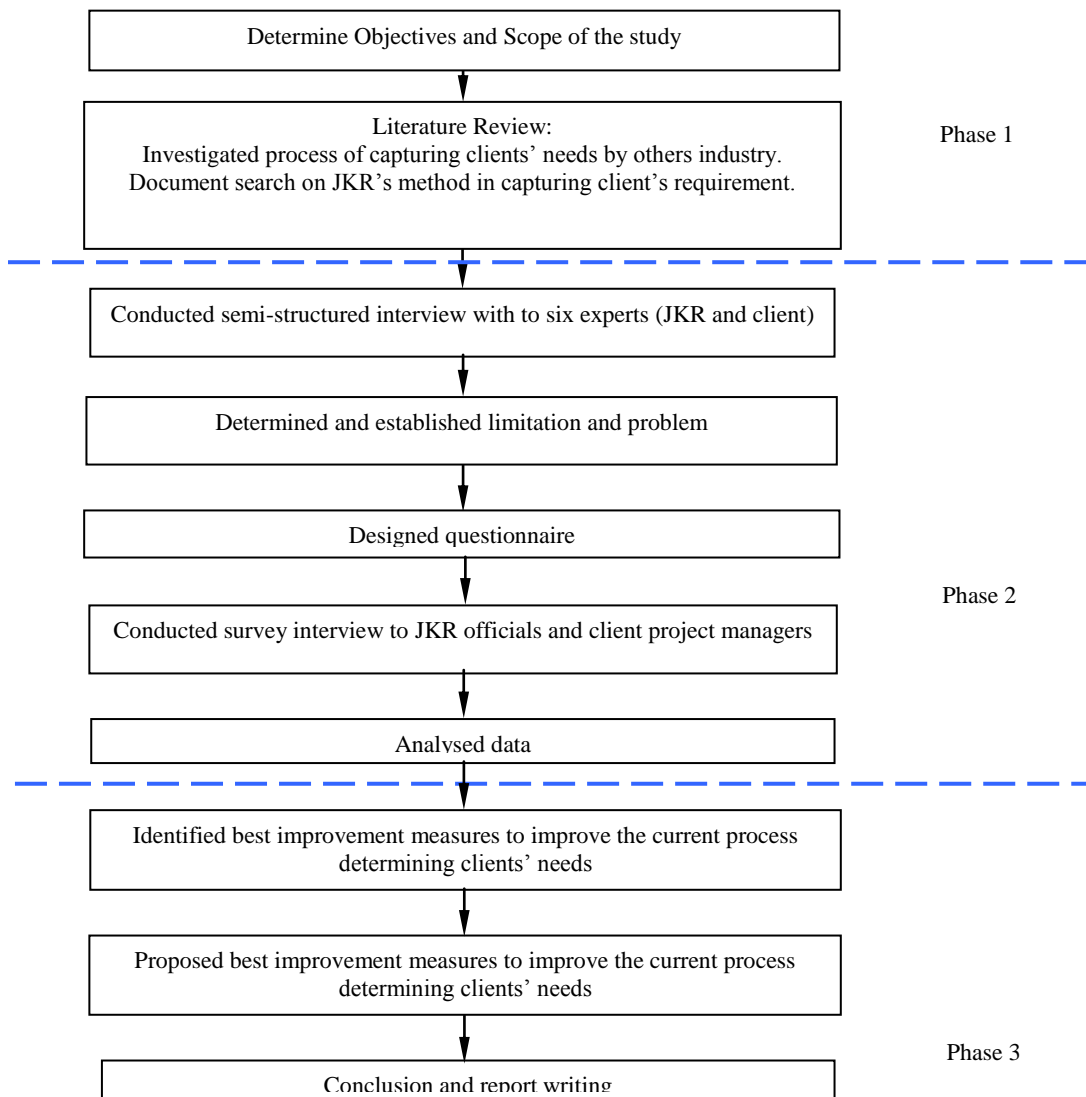


Figure 1 Schematic of Research Methodology