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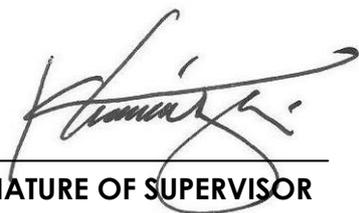
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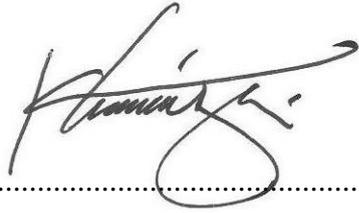
  
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**PERFORMANCE EVALUATION OF CONSULTANTS  
FOR PROJECT SUPERVISION MANAGEMENT**

**ZAINON BT HJ.TOHID**

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  
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**MAY 2011**

I declare that this capstone project report entitled "*Performance Evaluation of Consultants for Project Supervision Management*" is the result of my own research except as cited in the references. The capstone project report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

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## ABSTRACT

Consultants including the designers and project managers play an important role in managing through stages of project supervision management. Feedback from the client revealed that consultants fail to deliver project according to the quality standard, cost and time specified and it is believed that it is due to the poor project management of the consultants. Problems such as design failure, lack of management expertise on government project procedures also delay the process of project payment. One of the critical steps in construction project is selection of project professional team members. Therefore, evaluating past performance of consultants is very important in order to appoint the right consultant which eventually will ensure high quality of works and reduce project failures. This study focuses on the project management supervision and procedures in the Ministry of Education, Putrajaya. The objective of the study is to determine the current performance evaluation system of consultants. The study also aims at identifying issues and major limitations of current performance evaluation system and finally developing a guideline for improvement of current performance evaluation of consultants. The population of the study was the staff of department of development in the ministry which consisted of 50 professionals and 50 respondents from technical project teams. Of the 100 questionnaires distributed, 31 valid replies were received, which represent a response rate of 31%. 84% has been involved in evaluating performance of consultants while 45% are professionals. All the data were processed and analyzed using statistical Package Social Science (SPSS). The results of the survey, the mean expectation of each of the five performance levels, i.e. "poor", "average", "good", "very good" and "excellent" has been established for the seventeen quantitative indicators (QIs). The mean expectations not only provide an easy reference for assessors to determine which performance level for consultants should fall into but also to cater for a slight variations in assessors perception.

## ABSTRAK

Perunding memainkan peranan yang sangat penting dalam pengurusan projek. Maklumbalas dari pihak pelanggan mendapati bahawa sesetengah perunding didapati gagal melaksanakan projek dengan kualiti, kos dan masa yang telah ditetapkan kerana faktor pengurusan projek yang lemah di kalangan perunding yang terlibat terutama masalah seperti kegagalan rekabentuk serta kekurangan tenaga kepakaran terutama dalam mengurus projek kerajaan. Antara faktor yang penting di dalam projek pembinaan ialah pemilihan pasukan perunding projek yang berkeelayakan. Oleh kerana itu, penilaian pencapaian terdahulu perunding tersebut adalah penting bagi memastikan pemilihan perunding yang berkeelayakan bagi memastikan kejayaan sesuatu projek. Kajian ini tertumpu kepada kaedah penilaian perunding dalam pengurusan projek yang dilaksanakan di Kementerian Pelajaran Malaysia. Objektif kajian adalah bagi mengenalpasti sistem penilaian perunding sedia ada serta mengenalpasti isu yang berkaitan bagi tujuan penambahbaikan. Kajian ini juga bagi mencadangkan garis panduan yang boleh diguna pakai untuk penambahbaikan sistem penilaian perunding yang sedia ada melalui kaedah soal selidik yang meliputi pegawai profesional dan teknikal yang terlibat di dalam pengurusan projek dan penilaian perunding. Dengan pendekatan yang diambil diharap dapat menjadi garis panduan kepada penilai untuk menilai perunding dengan lebih berkesan di masa akan datang.

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**LIST OF ABBREVIATIONS**

APK	Arahan Perubahan Kerja
AEC	Engineering and Construction Firm
BEM	Board of Engineers Malaysia
BAM	Board of Architect Malaysia
BQSM	Board of Quantity Surveyors Malaysia
BSC	Balanced Scorecard
CCC	Certificate of Completion and Compliance
CF	Certificate of Fitness
CPE	Consultant Performance Evaluation
CIDB	Construction Industry Development Board
CPS	Collaborative Project Scorecard
CNC	Certificate Non Compliance
CPC	Certificate Practical Completion
CMGD	Certificate Making Good Defects
CCSM	Consultant Concept Selection Model
CV	Coefficient of Variance
DB	Design and Build
DBB	Design-Bid-Build
DE	Development Expense
DLP	Defects Liability Period
EPU	Economic Planning Unit
EC	Engineering Consultants
EOT	Extension of Time
IBS	Industrialised Building System
JPP	<i>Jawatankuasa Penilaian Perunding</i>

**LIST OF ABBREVIATIONS**

JKR	<i>Jabatan Kerja Raya</i>
MOA	Memorandum of Agreement
MOE	Ministry of Education
ME	Mean Expectation
PFI	Public Fund Initiatives
PM	Project Management
PMP	Project Management Performance
PHK	<i>Pelarasan Harga Kerja</i>
QI	Quantitative Indicator
RMK9	<i>Rancangan Malaysia ke 9</i>
SPSS	Statistical Package Social Science
TOR	Terms of Reference
UBBL	Uniform Building by Laws

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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

A project can be considered to be the achievement of a specific objective, which involves a series of activities and tasks which consume resources. It has to be completed within a set specification, having definite start and end dates. Other definition of project is its distinctive characteristics which is a project is a temporary endeavour undertaken to create a unique product or service. Temporary means that every project a definite beginning and a definite end. Temporary does mean short in duration because some project last for several years. Unique means that the product or service is different in some distinguishing way from all similar products or services. Projects involve by doing something that has not been done before which therefore unique.

Project Management is the application of knowledge, skills, tools and technique to project activities in order to meet stakeholder needs and expectations from a project. It can be defined as the process of controlling the achievement of the project objectives by utilising the existing organisational structures and resources, it seeks to manage the project by applying a collection of tools and techniques. (William, 1997).

Project management process means planning the work and then working the plan. Project management involves a process of first establishing a plan and then

implementing that plan to accomplish the project objective. (Clement and Gido, 2009).

The role of project management in achieving project success defining the requirement of work, establishing the extent of work, allocating the resources required, planning the execution of the work, monitoring the progress of the work and adjusting deviations from the plan. It is concerned with on-time delivery, within-budget expenditures and appropriate performance standards. (Munns, 1996).

The factors that effect the project management success or failure would include inadequate basis for project, lack of skills as project manager, inadequately defined tasks, lack in project management techniques among the project team and lack of commitment to a project. It is suggested that successful project management requires planning with a commitment to complete the project, a careful appointment of a skilled project manager or project consultants, project planning, problem and mistake during the project have been identified, communication flows and increase performance of project team.

The careful appointment of a skilled project manager or project consultants is one of the factors that will ensure the project success. Therefore, for this study it will focus on the project implementation and supervision of consultants in the Ministry of Education, Putrajaya. Ministry of Education is selected because it is one of the ministry that has given a high project budget to monitor a lot of projects specifically on school projects. The vision for the Department of Development, Ministry of Education is to achieve world class standard of project management in physical work by the year 2020. The mission statement is to be the leading in providing a good and quality physical projects and facilities which will satisfy the stakeholders and end users while the objective is to ensure that project implementation with an approved project brief by the committee of standard and cost (EPU), Jabatan Perdana Menteri, resource planning and also project schedule. To ensure project supervision by consultants and contractor comply with the contract as well as quality and standard through a regular project audit inspection. Project fund

is from the Public Fund Initiative (PFI) and also from the Development Expense (DE). Total projects for the Ninth Malaysian Plan (RMK9) project is more than 15,000 which cost approximately RM26 billion. Projects in the Ninth Malaysian Plan (RMK9) is 12,227 approximately RM19 billion with a direct supervision from the ministry through the technical unit while more than 3000 projects which cost approximately RM7 billion is monitor by JKR. Project team in technical unit, development department is responsible for monitoring the performance of consultants through various stage such as design, tender document process, local authority requirement, certificate of completion and compliance (CCC ) or certificate of fitness (CF) approval, proposal of cost of projects, giving advice during selection of contractors, monitor and supervise project consultants, approve the interim payment, giving advice during negotiation process, supervise the preparation of contract document, final account and monitor the performance of consultants. There is more than 1300 consultant companies registered with the ministry and some of them has been hired during the Ninth Malaysia Plan (RMK9) projects which ended at the end of year 2010. Therefore, performance evaluation model for consultants is very important to ensure acceptable quality of projects.

## **1.2 Problem Statement**

There are more than 15,000 of projects in Ministry of Education involving more than 1300 consultants companies. The number of consultants is increasing annually depending on the existing national project budget situation. Currently, implementation of performance evaluation is not fully practiced. There are no specific models of evaluation at different stages of project management. Furthermore, the existing evaluation system only emphasizes certain criteria of consultant's performance and quality at the end of the project. Feedback from JKR clients revealed that consultants fail to deliver project according to the quality standard, cost and time specified and it is believed that it is due to the poor project management of the consultants. Some of the problems of consultants are design fault, discrepancies in tender drawings and construction drawings, lack of quality of design

for example does not comply with authority requirement, discrepancies increase the variations of works and cost, lack of knowledge and experience problems, attitude problems of consultants towards government officers and regulations, lack of professionalism and commitment by not attending project meeting with the client, lack of quality control awareness where the company practice without the ISO standard system, unimpressive result of works with a lot of defects reported when the project is completed, incomplete handing over of project documents where project finishing for handing over but the relevant documents are not completed for record. Some other problems that effect project success is the work load of consultant's especially in Sarawak and Sarawak where a lot of school projects but only a few of consultants practice and the limited time for expenses due to current project funding system.

Problems such as design failure which later need to be redesign and expensive construction, lack of management expertises on government project procedures also delay the process of project payment. There are also legal entanglement and claim problems because of ethical issues. Due to improper consultants performance evaluation system and performance record of consultants for the previous job with the Ministry of Education which in return repeating the same issues and problems selecting the same poor of performance consultants. One of the critical steps in construction project is selection of project professional team members. Therefore, evaluating past performance of consultants is very important in order to appoint the right consultant which eventually will ensure high quality of works and reduce project failures.

On the other hand, project success depends on the management capabilities of the project team members. A project is a planned undertaking that requires a set of human tasks and activities toward achieving a specific objective within a defined time period. Projects are temporary, though they may last from few hours to many years. A team project involves a group of people with complementary skills and experiences, working together to accomplish the goals and objectives of the project. The purpose of the team is to develop and execute a work plan that will meet the

expectations of the project. Everyone in a team is committed and dedicated to the same thing meeting the goals of the project. Although the goals may be similar, how the team execute the work plan is varies(Zachary Wong, 2007).

### **1.3 The Objectives**

The following are the objectives of this study:

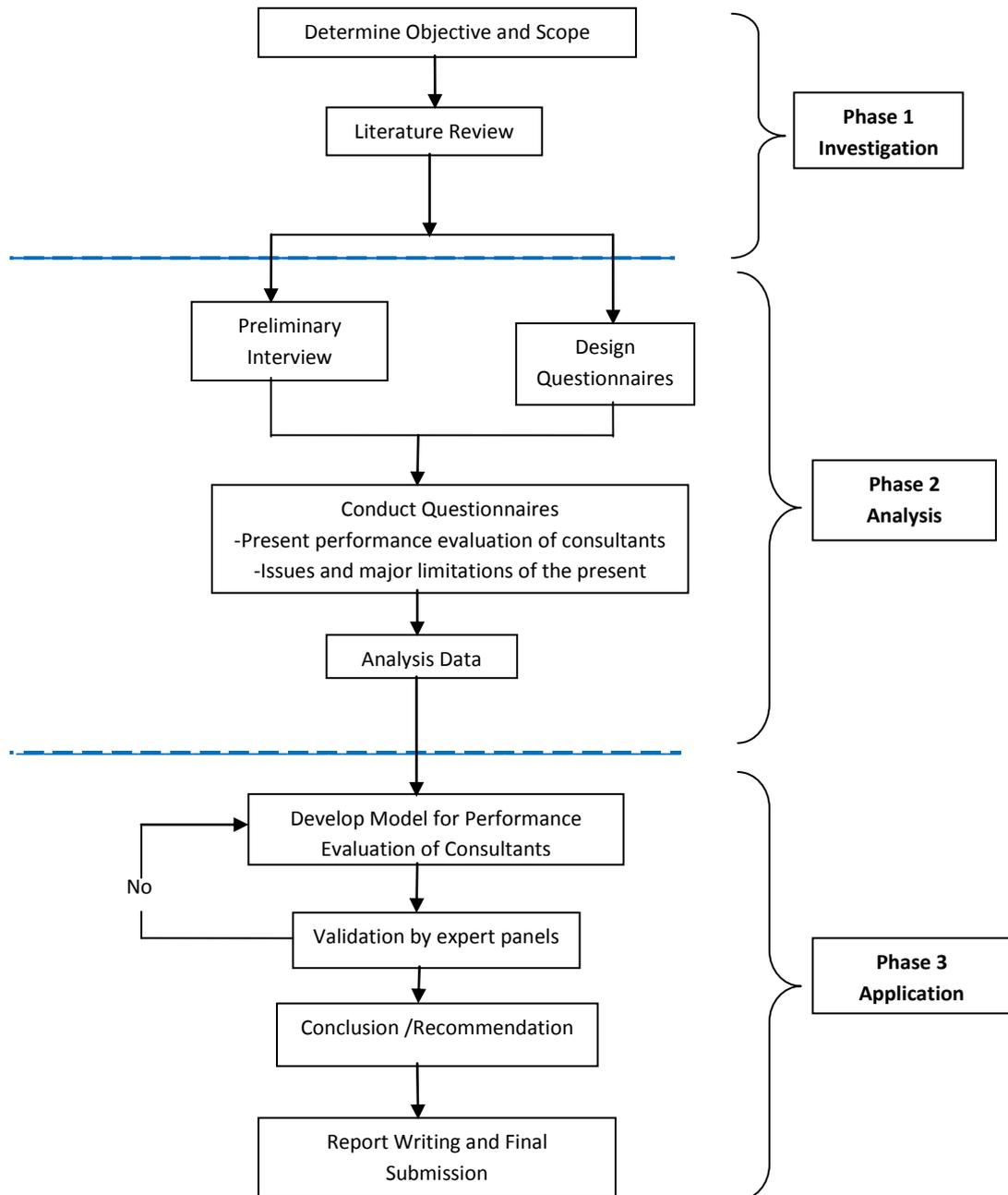
- i. to determine the current performance evaluation system of consultants.
- ii. to identify issues and major limitations of current performance evaluation system.
- iii. to propose a guideline of performance evaluation as an improvement to current performance evaluation of consultants.

The study will include the current performance evaluation of consultant that has been implemented through the Ninth Malaysian Plan (RMK9) in the Ministry of Education project development office. It was recorded that the total number of consultants companies that are registered consultants with the ministry is more than 1300 companies. However, for this research of study, it will be focusing only a few of consultants that has involved especially in school projects during the Ninth Malaysian Plan (RMK9). In this study, a few case studies of performance evaluation that are carried through the entire project life cycle: i.e. from conceptual planning until construction. A study on the current evaluation system of consultants which highlighted on some of the projects and identifying the current issues and major limitations of the present practise.

#### **1.4 Brief Research Methodology**

Research methodology is a framework for the researcher on how a study is carried out, such as process of collecting, analyzing, interpreting observations. Therefore, Figure 1.1 outlined the research methodology of this study. It is divided into three phases: Phase 1: encompasses the objective, scope and the literature review. and Phase 2: preliminary interview with experts in project management involves the case studies of current consultant performance evaluation process and related issue. Design questionnaires and conduct questionnaires to get analysis data and lastly, Phase 3 consists of developing guideline for performance evaluation process improvement through validation from expert and final submission.

The following at *Figure 1* represents the overall method of the study.



**Figure 1.1:** Schematic of research methodology