BENCHMARKING JKR QUALITY MANAGEMENT SYSTEM WITH INDUSTRY BEST PRACTICE

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UNIVERSITI TEKNOLOGI MALAYSIA
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BENCHMARKING JKR QUALITY MANAGEMENT SYSTEM WITH INDUSTRY BEST PRACTICE

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A capstone project report submitted in partial fulfillment of the requirements for the award of the degree of Master of Project Management

Faculty of Civil Engineering
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July, 2011
I declare that this capstone project report entitled “Benchmarking JKR Quality Management System (QMS) With Industry Best Practice” is the result of my own research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature : 
Name : Muhammad Syukri Bin Khasim
Date : 

........................................
........................................
To my beloved mother Hajjah Siti Salmiah Hj Yusoff and father Hj. Khasim Hj Bakar, my wife Aniza Mohd and my children Amar, Syamil, Azhad and Sofea.
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First of all, I would like to express my sincere appreciation to my project supervisor, Assoc. Dr. Mohamad Ibrahim Mohamad of the Faculty of Civil Engineering, Universiti Teknologi Malaysia, for his generous advice, patience, guidance and encouragement during the years of my study.

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Finally, I am most thankful to my parents and family for their support and encouragement given to me unconditionally in taking this project report.

Without the contribution of all those mentioned above, this work would not have been possible.
Competitive pressure today requires organization to develop and maintain a high level of coherence between strategy, action programmes, practices and performance. Benchmarking has become synonymous with successful performance of organization. As a certified organization with MS ISO 9001:2000 in Quality Management System (QMS) it is upmost important for JKR to evaluate its current performance in project implementation to ensure that it exceeds their clients and stakeholders expectation. The study has been carried out with the aim to review to the extent of how benchmarking concept being applied by JKR. It also explores the potential area in JKR that need to be benchmarked in the future as this concept is still new to JKR. The methodologies used for this study include intensive literature review, interviews with expert panels and questionnaires survey. The findings indicate that most of the JKR personnel are well aware of the concept of benchmarking and appreciate its importance to the organization. However as expected practically there is no real process of benchmarking has been carrying out in JKR so far. From the study the following processes have been determined as important to be benchmarked for JKR. Among the important areas are: project monitoring; design development; project planning; project control and project reporting system. This study also developed a general guideline for benchmarking procedure to be used by JKR. It is expected that JKR will review further this guideline to suit their own need.
ABSTRAK

Tekanan persaingan masa kini memerlukan organisasi membangunkan dan mengekalkan tahap perhubungan yang tinggi antara strategi, pelan tindakan, amalan dan prestasi. Penandaarasan menjadi semakin sinonim dengan kejayaan pencapaian organisasi. Sebagai sebuah organisasi yang telah mendapat persijilan MS ISO 9001:2000 adalah sangat penting kepada JKR untuk menilai semula prestasi dalam pelaksanaan projek untuk memastikan ia memenuhi jangkaan pelanggan. Kajian telah dijalankan dengan tujuan untuk menilai sejauh mana konsep penandaarasan telah dilaksanakan oleh JKR. Kajian telah merangkumi bahagian yang berpotensi untuk dibut penandaarasan di masa hadapan kerana konsep berkenaan masih baru di JKR. Metodologi yang digunakan dalam kajian termasuk pembacaan yang intensif, wawancara dengan panel pakar dan kajiselidik. Penemuan menunjukkan kebanyakan kakitangan JKR mempunyai kesedaran terhadap konsep penandaarasan dan maklumakan kepentingannya kepada JKR. Walau bagaimanapun seperti yang dijangkakan secara praktikalnya proses sebenar penandaarasan belum dilaksanakan dalam JKR. Daripada kajian tersebut beberapa proses yang penting telah dipastikan untuk dibuat penandaarasan oleh JKR. Antara proses-proses penting tersebut adalah: pemantauan projek; pembangunan rekabentuk; perancangan projek; kawalan projek dan system pelaporan projek. Kajian juga menghasilkan garispanduan umum untuk digunakan oleh JKR. Adalah dijangkakan pihak JKR akan menyemak semula dengan lebih lanjut untuk disesuaikan dengan keperluan organisasi berkenaan.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>THESIS TITLE</td>
<td></td>
<td>i</td>
</tr>
<tr>
<td>DECLARATION</td>
<td></td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td></td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td></td>
<td>vi</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td></td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td></td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td></td>
<td>xiv</td>
</tr>
</tbody>
</table>

## 1 INTRODUCTION

1.1 Introduction          1
1.2 Problem Statement     2
1.3 The Aim and Objectives 3
1.4 Scope and Limitation of Study 3
1.5 Brief of Research Methodology 4

## 2 THE CONCEPT OF BENCHMARKING

2.1 Introduction          6
2.2 Concept of Benchmarking 6
2.3 Benefits of Benchmarking 7
2.4 What to Benchmark     8
2.5 The purposes of Benchmarking 9
2.6 Type of Benchmarking
   2.6.1 Internal Benchmarking 11
   2.6.2 Competitive Benchmarking 11
   2.6.3 Functional Benchmarking 12
2.7 Guideline for Benchmarking Model 21
2.8 Benchmarking Code of Conduct 13
2.9 Business Process of Benchmarking Process 15
2.10 Problems with Benchmarking 17
2.11 Key Success Factors in Benchmarking 18

3. CURRENT APPROACH IN MEASURING JKR PERFORMANCE
   3.1 Introduction 20
   3.2 Background of JKR Malaysia 20
   3.3 Implementation of Quality Management System in JKR 21
   3.4 MS ISO9001:2000 22
   3.5 SistemPengurusanKualiti (SPK) JKR 23
   3.6 Project Management in JKR 24
   3.6.1 Planning Stage 25
   3.6.2 Design Stage 25
   3.6.3 Procurement Stage 26
   3.6.4 Construction Stage 27
   3.6.5 Handing-over Stage 28
   3.7 Performance Management 29
   3.7.1 SKALA 30
   3.7.2 Key Performance Indicators 30
   3.7.3 Quality of Design Output 31
# RESEARCH METHODOLOGY

4.1 Introduction 32  
4.2 Literature Review 32  
4.3 Interview with Expert Panels 33  
4.4 Questionnaires Survey 33  
4.4.1 Questionnaires Structure 33  
4.4.2 Distribution of Questionnaires 34  
4.4.3 Sampling Size 35  
4.5 Method of Data Analysis 35  
4.5.1 Interview with Expert Panel 35  
4.5.2 Demography of Respondents 36  
4.5.3 Cronbach’s Alpha Analysis 36  
4.5.4 Frequency Analysis 36  
4.5.5 Average Index Analysis 36  
4.6 Conclusion 36

# DATA COLLECTION AND ANALYSIS

5.1 Introduction 37  
5.2 Summary of Interview with Expert Panel 37  
5.2.1 Perception of Benchmarking in JKR 43  
5.3 Questionnaires Survey 47  
5.3.1 Background of Respondents 47  
5.3.2 Agreement Towards Benchmark Definition by Respondents 48  
5.4 Level of Satisfaction Towards JKR Current Practice 54  
5.4.1 Reliability Test 54  
5.4.2 Customer Satisfaction 55  
5.4.3 Project Timeframe 56  
5.4.4 Project Cost 57  
5.4.5 JKR Strategic Planning 58  
5.4.6 Competency of JKR Personnel 59  
5.4.7 Contract Management 60
5.4.8 Quality Control in JKR
5.4.9 Project Communication Plan
5.4.10 Reports and Information
5.5 Interview with Expert Panels
5.5.1 Awareness of Benchmarking in JKR
5.6 The Practices of Benchmarking in JKR
5.7 Proposal of Benchmarking Procedure
5.8 Conclusion

6 DISCUSSION OF RESULTS

6.1 Introduction
6.2 Improvement Process
6.3 Areas Need Benchmarking
6.4 Customer Satisfaction
6.5 Business Process Improvement
6.6 Quality Control in JKR
6.7 Level of Benchmarking Practice
6.8 Key Success Factors for Benchmarking Implementation
6.9 Organizational Factor
6.10 Organizational Culture
6.11 Customer Focus
6.12 Preparation for Benchmarking
6.13 Procedure for Benchmarking
6.14 Conclusion

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction
7.2 The Concept and The Importance of Benchmarking
7.3 The Critical Areas Need Benchmarking 90
7.4 The Procedure of Benchmarking in JKR 90
7.5 Recommendations for Future Research 91
7.6 Conclusions 91

REFERENCES 92
APPENDICES 95
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE NO.</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Tabulation of Interviewee Background</td>
<td>38</td>
</tr>
<tr>
<td>5.2a</td>
<td>Summary of Interview with Expert Panels</td>
<td>40</td>
</tr>
<tr>
<td>5.2b</td>
<td>Summary of Interview with Expert Panels</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
<tr>
<td>5.2c</td>
<td>Summary of Interview with Expert Panels</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
<tr>
<td>5.2d</td>
<td>Summary of Interview with Expert Panels</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td>Respond of respondent by various department</td>
<td>47</td>
</tr>
<tr>
<td>5.4</td>
<td>Benchmarking Brief Definition</td>
<td>51</td>
</tr>
<tr>
<td>5.5</td>
<td>The Importance of Benchmarking to JKR</td>
<td>52</td>
</tr>
<tr>
<td>5.6</td>
<td>Summary of Areas Need to Benchmark</td>
<td>53</td>
</tr>
<tr>
<td>5.7</td>
<td>Reliability Statistic</td>
<td>54</td>
</tr>
<tr>
<td>5.8</td>
<td>Factors Contributes to Customer Satisfaction</td>
<td>55</td>
</tr>
<tr>
<td>5.9</td>
<td>Timeliness</td>
<td>56</td>
</tr>
<tr>
<td>5.10</td>
<td>Project Cost</td>
<td>57</td>
</tr>
<tr>
<td>5.11</td>
<td>Strategic Planning</td>
<td>58</td>
</tr>
<tr>
<td>5.12</td>
<td>Competency of JKR</td>
<td>59</td>
</tr>
<tr>
<td>5.13</td>
<td>Contract Management</td>
<td>60</td>
</tr>
<tr>
<td>5.14</td>
<td>Quality Control in JKR Project Implementation</td>
<td>61</td>
</tr>
<tr>
<td>5.15</td>
<td>Communication Plan in JKR Project Implementation</td>
<td>62</td>
</tr>
<tr>
<td>5.16</td>
<td>Reporting System</td>
<td>63</td>
</tr>
<tr>
<td>5.17a</td>
<td>Summary of Interview with Expert Panels</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
<tr>
<td>5.17b</td>
<td>Summary of Interview with Expert Panels</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
<tr>
<td>5.17c</td>
<td>Summary of Interview with Expert Panels</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>(continue)</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE NO.</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Schematic of Research Methodology</td>
<td>5</td>
</tr>
<tr>
<td>3.1</td>
<td>Quality Model</td>
<td>23</td>
</tr>
<tr>
<td>3.2</td>
<td>JKR Business Process in Project Management</td>
<td>24</td>
</tr>
<tr>
<td>3.3</td>
<td>Planning Process</td>
<td>25</td>
</tr>
<tr>
<td>3.4</td>
<td>Design process</td>
<td>26</td>
</tr>
<tr>
<td>3.5</td>
<td>Construction Process</td>
<td>28</td>
</tr>
<tr>
<td>3.6</td>
<td>Testing and CommissioningProcess</td>
<td>28</td>
</tr>
<tr>
<td>3.7</td>
<td>Handing-over Process</td>
<td>29</td>
</tr>
<tr>
<td>5.1</td>
<td>Distribution Based by Sector</td>
<td>48</td>
</tr>
<tr>
<td>5.2</td>
<td>Distribution Based by Discipline</td>
<td>48</td>
</tr>
<tr>
<td>5.3</td>
<td>Years of Experiences</td>
<td>49</td>
</tr>
<tr>
<td>5.4</td>
<td>Scope of Works</td>
<td>49</td>
</tr>
<tr>
<td>6.1</td>
<td>Benchmarking Stages</td>
<td>82</td>
</tr>
</tbody>
</table>
## LIST OF APPENDICES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The Interview Questionnaire Form</td>
<td>95</td>
</tr>
<tr>
<td>B</td>
<td>The Questionnaire Survey Form</td>
<td>97</td>
</tr>
<tr>
<td>C</td>
<td>The Interview Questionnaire Form</td>
<td>105</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

1.1 Introduction

Nowadays, organizations are looking ways that can improve their performance. One of them is by using benchmarking. Survival of today business is about learning from others who are better. Useful lessons can be learned by organization who have compare themselves with other organization in the same or different industries. Competitive excellence should be the driving force for continuous improvement. Quality, time and cost have become the target for benchmarking study.

Benchmarking is a method used for performance improvement by organizations. It was done by comparing, adapts and adopts and revised other organization best practices and implements it in the organization. Continuous improvement process has an impact to the performance of the organization. Nowadays it has become a common tool for the organization to sustain and be competitive.

The philosophy of benchmarking is to provide an open minded thinking to the organization in the sense of always looking for better way of improvement. New idea will be generated and the way of doing thing will be improved or change to meet the customer satisfaction. The outcome of benchmarking will be on reducing operational cost, service delivery, and product quality and customer satisfaction.
Public is seeking improvement of the services by government agency. Various programs have been done by government to improve the quality of public service such as service counter quality, benchmarking, total quality management, MS ISO 9000 and other various programs. Government had launched the Guideline for the implementation of MS ISO 9000 in the Civil Service (MAMPU, 1999). The guideline anticipates the transformation of Malaysian public sector in more effective quality management. However the quality improvement program should be continuously done and revised to meet the challenge of current change.

1.2 Problem Statement

JKR as the largest technical of government agency has been given a task as a project implementer for construction of government infrastructure, building and managing government assets. JKR Quality Management System (QMS) known as Sistem Pengurusan Kualiti (SPK) was certified by SIRIM in 2000. The main objective of SPK JKR was to ensure the customer satisfaction by delivering project with quality, within cost and agreed time. However reports from JKR monitoring system known as SKALA and Construction Quality Audit show the project delivery does not meet the customer satisfaction. Among the problems and comments highlighted by clients are as following;

i. The design does not complete on time
ii. The tender does not execute as schedule
iii. Lack of communication among stakeholder
iv. Lack of coordination among stakeholder
v. The project does not complete on time as schedule
vi. The project need extension of time in order to be completed
vii. The quality of construction and installation does not meet the good engineering practice and functional requirement.
viii. Discrepancy and error in construction drawing
1.3 **Aim and the Objectives**

The aim of the study was to produce a systematic procedure to benchmark the JKR Quality Management System with industry best practices.

The objectives of the study are as follow:

a) To review the concept of benchmarking and its importance in JKR
b) To determine the critical area need to be benchmarking for JKR.
c) To proposed a systematic approach for JKR to establish a standard benchmarking procedure

1.4 **Scope and Limitation of Study**

The focus area of benchmarking covers in this study is limited to the project design process. Project design process is the second stage in project management after planning process.

The scope of the study was limited to the following factors

i. **Time**
   
The time is limited and done in two semesters. The first part of study was done in semester 1 for literature review. The second part of study was done in semester 2 for data collection, analysis and conclusion.

ii. **Stakeholder**
   
   All data were collected from respondents of JKR Headquarters specifically from design office, project office, client ministry; Planning Division Ministry of Health and consultants involved with healthcare project.

iii. **Scope of Project**
   
   All data collection were based on healthcare facility project manage by JKR Headquarters.
1.5 Brief of Research Methodology

Research methodology is a framework on how the study is carried out. The research framework is divided into three phases; phase 1, phase 2 and phase 3. Phase 1 involves determinations of aim, objectives of the study and scope of study. Literature review involves reading of articles, journals, books related to benchmarking, quality management system and best practices. Phase 2 involves the interview with expert panels to get a clear perspective about the concept of benchmarking issue related to JKR, performance indicators, business process and document search to gather on performance exercise based on current JKR practice in evaluating the performance of organization. Comparison has been made with current performance practice and summary of interview. Then questionnaires were used to investigate the understanding and the importance of JKR, the area need to benchmark and the level of satisfaction towards current JKR practices from respondents; JKR and non JKR. The data collected from survey was analyzed. Phase 3 consists of producing a systematic procedure of benchmarking for JKR. The proposed procedure was validated by expert panels.
Figure 1.1: Schematic of Research Methodology