

UNIVERSITI TEKNOLOGI MARA

**KPI MEASUREMENT FRAMEWORK FOR THE
MALAYSIAN CONSTRUCTION PROJECT**

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ABSTRACT

Most industries are aware of the existence of KPI measures to measure performance. However, for traditional businesses, performance is still measured solely in financial terms. The increasing number of project failures nowadays will encourage the organization to recognize the value and the importance of project measures. Therefore there is a great need for the Malaysian construction industry to identify an effective and realistic KPI framework to measure project performance to ensure continuous improvement and successful delivery of projects.

The focus of this research is to develop an effective KPI measurement framework that will enable contractors to determine the standard of their projects and to review them so that measures can be taken to improve performance and project delivery.

Empirical research was undertaken by means of questionnaire surveys which were administered to the Class G7 of Malaysian contractors, resulting in a total of 60 valid responses returned. Further statistical analysis of the collected survey responses provided information on the identification of perceived KPIs and displayed realistic parameters as well as the contractors' understanding of performance measures. In this study, the results were analysed by means of various statistical methods through the statistical analysis software, SPSS 17. The findings from the research and the questionnaires were then used in the development of a KPI framework model. In order to underpin the framework developed, functionality trials were conducted with six case studies by using the data from completed projects in the formulated framework to obtain quantifiable results.

The findings from the research resulted in the development of the KPI Measurement Framework model for the contractors to determine and assess the standard of project performance. This framework is the lagging measures of the project and can be easily used to improve the performance of other projects. The six KPIs (time, cost, quality, productivity, customer satisfaction and safety and health) identified in the framework were used to assess the level of project performance.

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TABLE OF CONTENTS

TITLE PAGE	
AUTHOR'S DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENT	v
LIST OF TABLES	ix
LIST OF FIGURES	xi
ABBREVIATIONS	xii

CHAPTER 1: INTRODUCTION

1.1	Background of the Research	1
1.2	Justification of Research	3
1.3	Problem Statement	5
1.4	Research Objectives	6
1.5	Research Questions	7
1.6	Limitation and Scope of the Study	8
1.7	Structure of Thesis	8
1.8	Summary	10

CHAPTER 2: LITERATURE REVIEW

2.1	Introduction	11
2.2	Definitions	11

2.2.1 Construction Industry	11
2.2.2 Performance Measurement	12
2.2.3 Key Performance Indicators (KPIs)	13
2.2.4 Critical Success factors	13
2.3 An Overview of the Construction Industry	14
2.4 The Nature of the Construction Industry	16
2.5 The Characteristic of the Construction Industry	17
2.6 The Malaysian Construction Industry	19
2.7 Project Performance Measurement in the Construction Industry	22
2.8 Project Performance in the Malaysian Construction Industry	29
2.9 Challenges Related to Project Performance Measurement	30
2.10 Identification of KPIs for Project Success	32
2.11 Criteria of Project Success	33
2.12 Previous Studies Related to KPI	39
2.13 Selection of KPIs	42
2.14 Justification for the Selection of KPIs	49
2.15 Development of Framework	54
2.16 Summary	61

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction	63
3.2 Research Approach and Process	63
3.3 Research Method	65
3.4 Research Sampling	68