

FACTORS AFFECTING THE SUCCESS OF A CONSTRUCTION PROJECT

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A project report submitted in partial fulfillment of the
requirements for the award of the degree of
Master of Science (Construction Management)

Faculty of Civil Engineering
Universiti Teknologi Malaysia

JUNE 2013

To my parents
FATHER & MOTHER

To my
Beloved Brothers and dear friends.

Thanks for supporting me days and night until I reached to this level, may
ALLAH blesses you all.

ACKNOWLEDGEMENT

First of all, I would like to thanks Allah for giving me enough knowledge and precious opportunity to complete this research, I would like to take this opportunity to express and record my gratitude towards my supervisor **Assoc.Prof. Sr. Dr. Zakaria Mohd. Yusof**, for all the time he allocated and all his guidance, encouragement, critics, and generosity to provide his experience and knowledge. Without his guidance and support, this project report would not have seen the light.

Also I would like to take this opportunity to express and record my gratitude towards my friend Dr. Siva Jaganathan for all the time he allocated and all his guidance, encouragement, critics, and generosity to provide his experience and knowledge.

I would like to express my apperception to the faculty of Civil Engineering's staff of Universiti Teknologi Malaysia, and to all Universiti Teknologi Malaysia's staff. Also, I would like to express my appreciation to the respondents who gave their time to respond to the questionnaire of this research and to all who contributed to make the process of getting information or collecting the data. Also, my sincere wishes to all friends in UTM.

Ahmed Ali Badri Hamid

ABSTRACT

Several researchers have tried to determine the factors for a successful project for a long time and it's found abounded in the literature. Lists of variables have been abounded in the literature. However, effective implementing of concept of critical success factors (CSFs) requires project strategies to procure the project/product are paramount important. Hence, increasing complexity and uncertainty of traditional procurement, inflicting pressure on the local construction industry to look for alternative approach. The study investigates CSFs and procurement strategies (PSs) of a construction project are considered as one of the vital ways to ensure project success and to improve the effectiveness of project delivery. Although the industry has long been using the traditional method to procure projects, however, with the increasing complexity and uncertainty in the construction industry, the traditional procurement procedure has become obsolete and inappropriate, thus putting pressure on the local construction industry to look for a more efficient alternative approach. The aim of this study is to determine the factor that contributes the success of construction project in Malaysia. This study uses a comprehensive literature review to determine CSFs factors and strategies to design a survey questionnaire. Based on the expert consensus and survey results, mean score method has been used in quantitative analysis to ranking the CSFs and strategies. As a result of this, the study developed Integrated Project Success (IPS) model for Malaysian construction industry as appropriate relationship-based procurement process (RBPP). The benefit of this study encourages policy makers and construction stake holders effective involvement in project procurement and project success.

ABSTRAK

Beberapa penyelidik telah cuba menentukan faktor-faktor untuk projek yang berjaya untuk masa yang lama dan didapati ramai sekali dalam kesusasteraan. Senarai pembolehubah telah ramai sekali dalam kesusasteraan, namun berkesan melaksanakan konsep faktor-faktor kejayaan kritikal (CSFs) memerlukan strategi projek untuk mendapatkan projek/produk adalah penting. Oleh itu, kerumitan yang semakin meningkat dan ketidaktentuan perolehan tradisional, mengenakan tekanan ke atas industri pembinaan tempatan untuk mencari pendekatan alternatif. Kajian ini menyiasat CSFs dan strategi pemerolehan (PSS) projek pembinaan dianggap sebagai salah satu cara yang penting untuk memastikan kejayaan projek dan untuk meningkatkan keberkesanan penyampaian projek. Walaupun industri ini telah lama menggunakan kaedah tradisional kepada projek-projek mendapatkan, bagaimanapun, dengan kerumitan yang semakin meningkat dan ketidaktentuan dalam industri pembinaan, prosedur perolehan tradisional telah menjadi usang dan tidak sesuai, sekaligus meletakkan tekanan ke atas industri pembinaan tempatan untuk mencari yang lebih pendekatan alternatif yang cekap. Tujuan kajian ini adalah untuk menentukan faktor yang menyumbang kejayaan projek pembinaan di Malaysia. Kajian ini menggunakan kajian literatur yang komprehensif untuk menentukan faktor CSFs dan strategi untuk reka bentuk soal selidik. Berdasarkan pakar konsensus dan keputusan kaji selidik, kaedah skor min telah digunakan dalam analisis kuantitatif untuk ranking CSFs dan strategi. Hasil daripada ini, kajian yang dicadangkan penyampaian projek bersepadu (IPD) yang berasaskan hubungan perolehan strategi (RBP) yang sesuai dan dibangunkan bersepadu kejayaan projek (IPS) model bagi industri pembinaan Malaysia. Manfaat kajian ini menggalakkan pembuat dasar dan pihak-pihak berkepentingan pembinaan penglibatan yang berkesan dalam perolehan projek dan kejayaan projek.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Construction industry plays a major role in development and achievement the goals of society. The construction Industry constitutes an important element of the Malaysian economy, and plays an important role in generating wealth and improving the quality of life for Malaysian, the construction Industry also provides job opportunities for approximately 800,000 people (CIDB Malaysia, 2007). Over the last 20 years, the industry has consistently contributed approximately 3-5 per cent to the national GDP (CIDB Malaysia, 2009). Given this, under the Tenth Malaysia Plan (2011-2015), the Ministry of Works plans to inject an estimated RM 138 billion (approximately US\$46 billion) to enhance the growth of the construction sector (CIDB Malaysia, 2010). It shows how important to manage the projects in, cost-effectiveness, shorten construction time, good quality, efficiently and to enforce the success factors of a construction industry (Ali, et al., 2010).

Construction industry has complexity and dynamic in nature because it contains large number of parties as clients, contractors, consultants, shareholders

and, regulators. Buildings projects are becoming much more complex and difficult (Chan, et al., 2004). The project team is facing unprecedented changes. The success of a project is a very critical issue in the construction industry. The study of project success and the critical success factors (CSFs) are considered to be a means to improve the effectiveness of project. However the concept of project success has remained ambiguously defined in the mind of the construction professionals. Project success is almost the ultimate goal for every project. However, it means different things to different people. While some writers consider time, cost and quality as predominant criteria, others suggest that success is something more complex (Chan et al., 2004).

The concept of success in a construction project can, according to some researchers is evaluated only when the evaluation dimensions are adequately defined (Baker et.al, 1983; Slevin and Pinto, 1986; Morris and Hough, 1987, and Turner 1993). Generally, in any project the evaluation dimensions correspond to the traditional constraints of time, cost, and quality parameters. Ashley et al (1987) defined project success as “results better than expected or normally observed in terms of cost, schedule, quality, safety, and participant satisfaction”. The first study to identify lists of critical success factors was undertaken by David Ashley (1987), who identified which factors were most influential in successfully completing construction projects.

The study of project success and (CSFs) is often considered as one of the vital ways to improve the effectiveness of project delivery (Chan et al., 2004). One of the reasons of the difficulties in managing a construction project, especially in the government sector is due to the failure in determining the CSFs across project phases (Takim et al., 2004). Numerous studies have been conducted over the years to investigate factors that are really critical towards project success, (Chan and Kumaraswamy, 1996; Cooke and Davies, 2002; Nicolini, 2002; Chan et al., 2004; Anderson et al., 2006; (Toor and Ogunlana, 2009). Thus; highlighting the importance of critical success factors (CSFs) study towards construction project success. However, no general agreement can be made (Chan et al., 2004).

Therefore, the study very important to about determining project success consider what it means when a project is successful, and to whom. This is a question that should be answered first, before trying to solve the puzzle of the factors that influence success (Juha Salminen, 2005).

Different researchers have tried to determine the factors for a successful project for a long time. Lists of variables have been abounded in the literature; however, the concept of critical success factors CSFs. or project success remained vaguely defined as there is no general agreement achieved. It is generally accepted that the major goals of all parties involved in construction projects—owners, contractors, engineers and consultants in either the public or private sector is to successfully complete the project on schedule, within planned budget, with the highest quality and in the safest manner (Chan et al., 2004; Mohammed M. Alkhathami, 2004; Rohaniyati Salleh, 2009). The aim of this study is to determine the factor that contributes the success of construction project in Malaysia. This study uses a comprehensive literature review to determine CSFs factors and strategies to design a survey questionnaire. Based on the expert consensus and survey results, mean score method has been used in quantitative analysis to ranking the CSFs and strategies. The results suggest a strong consistency in perception between respondents in recognising the significance of human-related factors such as competence, commitment, communication and cooperation towards the success of a construction project, these factors being the core element in relationship-based procurement reinforced the need and viability of such procurement methods. As a result of this, the study proposed integrated project delivery (IPD) as appropriate relationship-based procurement (RBP) strategy and developed integrated project success (IPS) model for Malaysian construction industry. The benefit of this study encourages policy makers and construction stake holders effective involvement in project procurement and project success.

1.2 Issues

With rapid changes happening in the construction industry, both findings have become obsolete and unable to reflect the current development in the industry especially with the growing needs for a relationship-based approach in procurement in substitution to the traditional method (CIDB Malaysia, 2009). The general perception on the Malaysian construction industry as a whole is underachieving. It has low profitability and does not invest enough in training, research and development. Limited trust, little cooperation, poor communication and an adversarial relationship are among the key problem areas experienced in the Malaysian construction industry. Nevertheless, most of these findings are based on anecdotal evidence and hearsay without any concrete empirical support from established research methodology. Therefore, re-exploring the factors essential to the success of the construction project will help in gaining a better insight towards the industry, especially on the human-related issue. It also provides a strong foundation for further route of the current research on the development of an effective relationship-based procurement model in Malaysia.

1.3 Problem Statement

An examination of the relevant recent literature indicates that Malaysian construction projects are suffer from many problems and complex issues in projects success, in the private and public sector, because of many evidential reasons, that construction projects are frequently completed with large cost overruns, extended schedules and quality concerns, disputes, arbitration, litigation, and total abandonment. These problems caused by human-related factors, which originated from the nature of the traditional procurement procedure. According to (CIDB, 2009) the traditional competitive approached to procurement which relied on

independent firms bought together by competitive bidding has caused adversarial attitude and fragmentation in the construction industry.

1.4 Aim and Objectives of the Study

The aim of this study is to determine the factor that affect the success of construction project in Malaysia. To achieve this aim, the following objectives have been identified:

- i. To determine the critical success factors for the construction projects from general perspectives,
- ii. To evaluate the critical factor and strategy that effect on projects success in Malaysian construction industry, and
- iii. To develop a suitable model of relationship-based procurement process for Malaysian construction industry.

1.5 Scope and Limitation

The scope of this research focuses on Critical success factors, Human-related critical success factors that inflicted the project failure, and, to address relationship-based strategy for all levels of construction participants in Malaysian construction industry such as the client, contractors and consultants.

1.6 Significance of Research

For every finished construction project in Malaysia, a number of deficiencies or failures occur, and continue to occur. Occasionally, new problems develop and despite efforts to implement success factors, these problems have persisted. These problems were observed in the status of (Construction Industry Master Plan (2004)) and (CIDB, 2009), indicates the traditional competitive approached to procurement which relied on independent firms bought together by competitive bidding has caused adversarial attitude and fragmentation in the construction industry.

Therefore, this research will contribute to the formation of a relationship-based approach model which is suitable to the Malaysian construction industry context in line with the aspiration of Malaysian Construction Industry Master Plan (2004) in order to help project parties alleviate the human related problem, and minimize construction project problems. This gap in the research has motivated the current study.

1.7 Brief Research Methodology

This research methodology is briefly presented by flow chart as shown in Figure 1.1. Detail of the methodology will be explained in chapter 3.

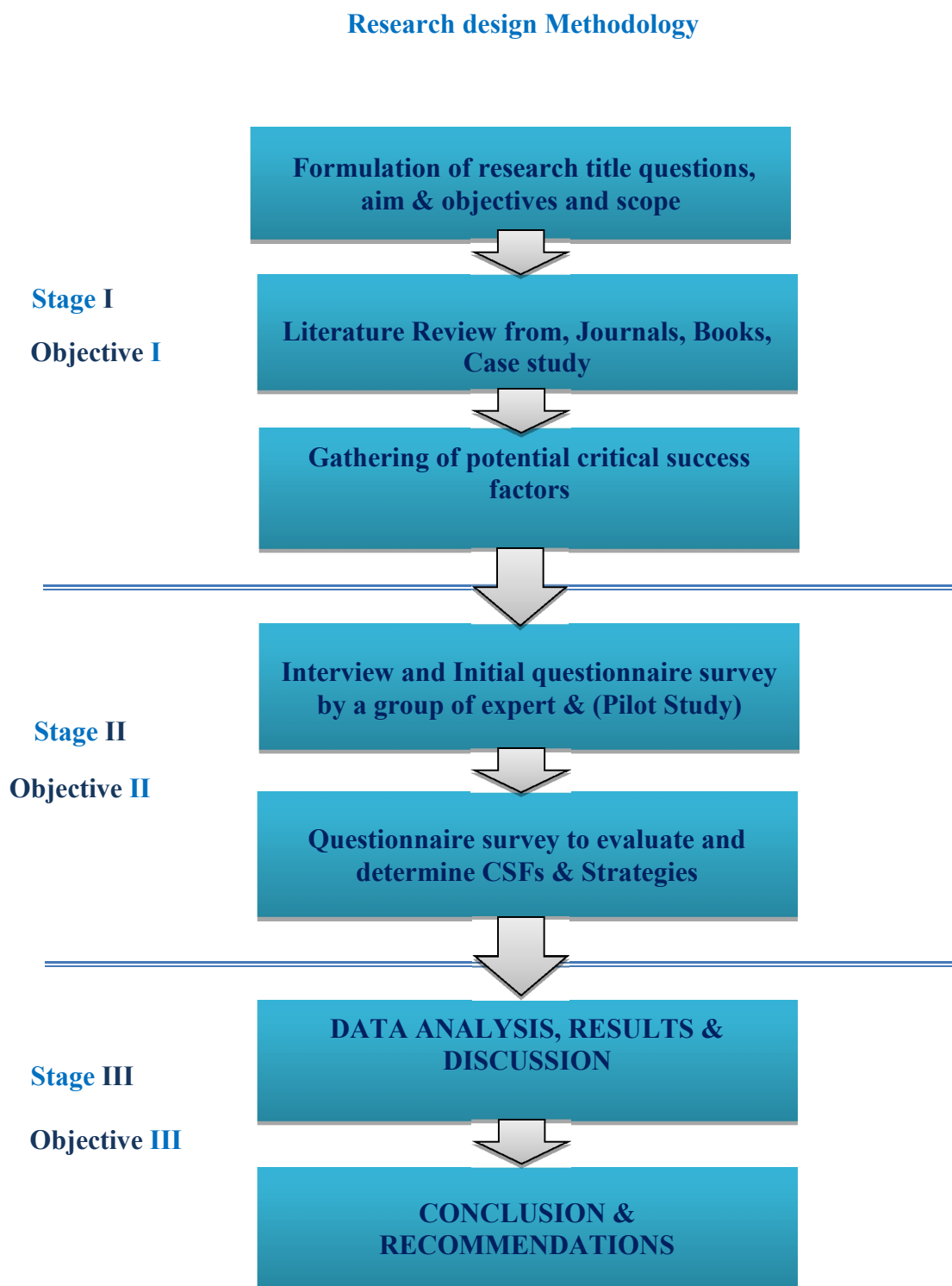


Figure 1.1 BriefResearch design Methodology

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