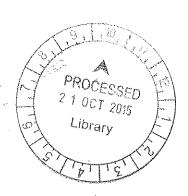


THE STUDY ON THE BENEFITS AND CONSTRAINTS OF USING DESIGN AND BUILD PROCUREMENT METHOD IN THE CONSTRUCTION INDUSTRY



BY

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DECLARATION

I, Ching Khai Linn, Student ID: I11007903 hereby declare that the work in this report is my own work and the appropriate credit has been given where due references have been made to the work of other researchers.

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ABSTRACT

Design and Build (D&B) procurement is one of the procurement method being adopted in the construction industry in Malaysia. It is operated in such a way that the Contractor is the single sole who are responsible for both the design and construction works. Besides, it is one of the procurement which is able to provide with a more accurate estimation of cost and time mainly due to the Contractors who are employed for the execution of the works are those who have the experiences in the similar project, thus, able to supply the Clients with the overall estimate of cost and time needed to complete the whole works.

For this research, study is conducted to investigate the benefits and constraints arise to the construction parties included Clients and Contractors by using D&B procurement in the project construction. Besides, this research also served to identify the factors to be taken into consideration properly before selecting the most suitable procurement method to be applied for a project.

Questionnaire is one of the method used in collecting the data to answer the objectives set up. Basically, the targeted population for the questionnaires are specified to only those Clients and Contractors who have the experiences in participated in project using D&B procurement. From the data obtained, it showed that the common benefits provided by D&B procurement included the faster pace of construction, single point of responsibility and price certainty before the construction. From the analysis done, the initial price higher, inflexibility and substantial tendering cost are common constraints arise using D&B through the experiences from the Clients and Contractors. Regarding the key elements to be considered before choosing on the types of procurement method to

be implemented, cost is considered to be the most vital factors as compared to risk, time, complexity of construction etc.

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LIST OF ABBREVIATIONS

Q.S ----- Quantity Surveyor

D&B ---- Design and Build

RFP ----- Request for Proposal

BQ ----- Bills of Quantities

Etc. ---- Et Cetera (So forth, so on)

CHAPTER 1: INTRODUCTION

1.1 DEFINITION OF PROCUREMENT

According to Mathonsi and Thwala (cited in El Agha, O. I., 2013), procurement method is also known as project approach, procurement system, procurement delivery method or project delivery system in the construction industry field. Masterman (cited in El Agha, O. I., 2013) argued that contemporary procurement method nowadays not only embrace design and construction but also financing, operating and facilities management. It is described in more precious way as below:

- i) It is a systematic structure implemented by the employer in carrying out the operation of a project on time.
- ii) It is the pre-conditions key elements in ensuring the successful achievement of the Client's objectives; time, cost and quality.
- iii) It is also a systematic approach that assigns the specific responsibilities and authorities to the project participants and organizations and defined the various elements in the construction of a proposed project (El Agha, O. I., 2013).

Rajeh, M., Tookey, J and Rotimi. J (2013) stated that procurement method selection is an essential but difficult step in the execution of a project. The criteria in choosing the most suitable procurement approach is basically based on the Client's objectives and priorities influenced by the project constraints. A model is developed in representing an analytical form of guidance, helping the Client in making the decisions with the advice from the Consultant such as QS. This model will increase the understanding regarding the way the proper selection of the procurement method to bring the positive effect in the project performance.