

**THE IMPLEMENTATION OF DESIGN AND BUILD PROCUREMENT
APPROACH IN LOCAL CONSTRUCTION INDUSTRY**

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ABSTRACT

In our local construction industry, the design and build procurement method had been quite widely used especially on the large and complex project. However, there was little research being conducted on the implementation of this approach in our construction industry. Therefore, this research was aimed to identify the advantages of practicing design and build procurement method. Moreover, the problems/constraints in practicing design and build procurement method will also be studied. Next, the major successes factors in the project practicing design and build procurement method will also be part of this research objective. Finally, this research will also include the study on the effectiveness of the design and build method in shortening the construction time, saving the construction cost and deliver better end product. Survey was conducted through questionnaires distributed among local contractors' firm based in Kuala Lumpur and Selangor state. Upon receiving the feedbacks, SPSS program will be used to analyze it. It was found that the overall performance of design and build approach are in better form. Therefore, this approach should be more widely practiced and not only limited to large and complex projects only.

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CHAPTER I

INTRODUCTION

1.1 General Information

The design and build system was first introduced in Malaysia in 1983 (Khairuddin Abdul Rashid, 2002). Design and build procurement method is not a new project delivery system, but rather one that has been used for centuries throughout the world. Those who built the projects that are landmarks of ancient civilization used processes essentially similar to modern design and build method (National Society of Professional Engineers, 1995).

The present design-bid-build system or known as traditional system, whereby the design and construction are separated, was borne out of the “spoils system” and lack of widespread technical expertise. Conceptually, traditional system was established to produce facilities to meet the needs of growing population at the lowest cost to the public. Nevertheless, the system ensured that goods and services were purchased on the basis of a low bid. Traditional system functioned on the basis that project plans and specifications, prepared by trained professionals and executed by a properly supervised low bidder would produce the desired product at the lowest cost (NSPE, 1995).

There appears to be a trend in Malaysia for some employers to elect for design and build type contracts for their developments. Until recently, the most common forms of contract adopted in Malaysia were based on the traditional arrangements between an employer, his consultants and the contractor. The common forms were those published by the Pertubuhan Akitek Malaysia (Malaysian Architects' Association) and Jabatan Kerja Raya (Public Works Department).

Despite the absence of a local design and build form of contract, local employers have, presumably under the advice of their consultants, had the option of choosing from various forms of contract available. In relation to design and build forms, the FIDIC Orange book appears to be the form that has been most popularly received by employers here (Khairuddin Abdul Rashid, 2002).

1.2 Problem Background

Nowadays, the construction industry is evolving towards a stage whereby cost, time and quality are being stressed and remain the main requirements from the end user. Although the use of traditional method to implement project has been there for many decades, recent years, as projects getting more complex and require fast track which demand greater emphasis on management techniques and engineering skills, the traditional approach to implement those projects were found to be not effective (Bahari Mohd. Ali, 1986)

The practicing of the traditional method had also came under heavy and severe criticism from the academicians both locally and overseas as being too slow, requiring too much input from the clients and the implementing agency hence causing a lot of delays. In local government projects, many of the projects conducted suffered delays in delivering the projects on time. The causes of delays were not made known whether it was related to the current practice of traditional method.

Design and build procurement method may seem to be suitable replacing the old traditional approach as it is known to be able to deliver projects in a faster way and require less input from the clients. However, there was little research being conducted on the implementation of this approach in our construction industry. Therefore, this research is meant to give an overview of the implementation of such approach in our construction industry.

1.3 Research Objectives

The main objectives of this research are as follows:

1. To identify the advantages of practicing design and build procurement method.
2. To identify the problems/constraints in practicing design and build procurement method.
3. To identify the success factors in the project practicing design and build procurement method.
4. To study the effectiveness of the design and build method in shortening the construction time, saving the construction cost and deliver better end product.

1.4 Scopes Of Study

This research will be involved the general contractors in Kuala Lumpur and Selangor state only. In other words, the respondents will be the contractors who are registered with the Construction Industry Development Board (CIDB) under Gred 7 or register with Pusat Khidmat Kontraktor under Gred A.

Therefore, the analysis of the data collected will solely based on the feedback received from the respective respondents. Lastly, the accuracy of the data will solely depend on the feedback collected through the questionnaires distributed.

1.5 Importance Of This Research

Design and build procurement method is not a new agenda in our country nowadays, it is very important to have a study on how well the implementation of the design and build method in our local construction industry. Apart from that, it is also very important to identify the constraints or problems faced by our local construction industry regarding the implementation of design and build procurement method.

Nevertheless, this research would also give an insight on the implementation of design and build projects in our country as well as reflect whether our local construction industry are ready or not, had been successful or not, in implementing the design and build procurement system locally.

More importantly, the outcome of the research can serve as a revision for the government sector especially the Public Work Department which is still practicing the old design bid build procurement system to evolve to a more practical and comprehensive procurement system which will benefits our public mostly

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