

UNIVERSITI TEKNOLOGI MARA

**PERCEPTIONS AND IMPLEMENTATIONS OF
VALUE MANAGEMENT IN MALAYSIAN
CONSTRUCTION INDUSTRY**

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ABSTRACT

The aim of the research was to explore perceptions among G7 contractors registered with the Construction Industry Development Board (CIDB) on the application of VM and VMCP in their projects and the implementation of VM in selected case studies.

This study had four main objectives. The first objective was to investigate on the perception of VM and VMCP application in the Malaysian construction industry. The second objective was to assess the application of VM in selected case studies. The third objective was to determine whether there is a need for Incentive Clause to be included in the PWD, CIDB and PAM Form of Contract in the perspective of contractors. The fourth objective was to determine whether the contractor's intention to share the resultant saving by adopting the VMCP has a significant relationship with the types of organization, year of establishment, number of staff and project turnover.

The research was based on the Triangulation approach which linked multiple methods of data collection and analysis that were the exploratory survey, the questionnaire survey, structured interviews, case studies and feedback from VM workshops.

From the questionnaire survey, it seemed that most of the contractors were agreed on the VMCP irrespective of their background of company such as types of organisation, year established, number of staff, procurement route, project turnover, major construction business activity and tendering arrangement. The result of the Chi-square test of association concluded that there was a significant association between the intention to share the resultant saving by adopting the VM and the organization's project turnover. However, the structured interviews revealed that all the 12 contractors agreed to adopt VMCP regardless whether they had or had not heard of the VMCP before because they were interested to share the resultant saving as a result of VMCP. As stated by the contractors, the most important reason they participated in VMCP was not only to eliminate unnecessary costs but to ensure better value for money. In addition, the majority of contractors strongly agreed that VMCP leads to enhancement of competitive advantage. Competitiveness was also chosen by the contractors as the most important impact as a result of adopting VMCP. From that survey, it was confirmed that the inclusion of VMCP in the conditions of contract is essential because most contractors concluded that VMCP is a very interesting methodology that should be adopted by both public and private sectors. The structured interviews further proved this statement.

Six (6) case studies were chosen to display the application of Value Management methodology adhering to the practice of the Australia / New Zealand standard or following the standard of the Society of American Value Engineers (SAVE). The results of these cases showed additional evidence that Value Management is an important technique that can further optimise value and reduce construction costs even though the designs had been finalised by the design team. However, the present procurement practice in Malaysia did not provide the benefits to the contractors should they have alternative design proposals or methods of construction that could reduce costs or construction time because there was no VMCP provision in the Conditions of Contract. As such, this research could contribute significantly to benefiting the construction industry in Malaysia.

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CHAPTER 1

INTRODUCTION: RESEARCH FRAMEWORK

1.1 Introduction

Value Management (VM) is currently widely used in many developed countries. There is growing interest in the adaptation of the VM principles in certain developing countries. VM potential has yet to be realized especially in Malaysia, like many other techniques and disciplines that has to undergo the stage of awareness prior to public recognition which also applies to VM (Che Mat, 1999).

VM is an activity that can reduce unnecessary increases in acquisition, operating and support costs without impairing those functional characteristics, which are defined by the organizations as essential.

Its markedly significant contribution led the United States Department of Defence to incorporate a VM incentive clause in their works contract since 1963 and was adopted in various organizations in other countries. However, this approach has yet to be properly adopted in Malaysian construction projects on its practical and beneficial application.

A Value Management Change Proposal (VMCP) is a proposal submitted by a contractor to the Government in accordance with the VM provisions in the contract. It proposes a change which, if accepted and implemented, provides an overall cost savings to the Government. The VM provisions in a contract permit the contractor to share in the savings which accrue from implementing the change (Department of Defense USA, 1999).

The construction industry is composed of heterogeneous and fragmented parties. It is a project-based industry with each project being unique. Within a project life cycle, a large number of separate firms are usually involved. For each project a temporary