CVR or EVA: WHICH ONE IS MORE EFFECTIVE TO CONTROL COST IN CONSTRUCTION PROJECT?

FOR REFERENCE ONLY

BY

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This report is submitted as a partial requirement for the degree of Bachelor of Science (Hons) in Quantity Surveying Faculty of Science, Technology, Engineering and Mathematics INTI INTERNATIONAL UNIVERSITY (APRIL, 2015)
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DECLARATION

I, Ooi Jia Ding, I12000468 confirm that the work in this report is my own work and the appropriate credit has been given where references have been made to the work of other researches.

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ABSTRACT

The aim of this research is to identify the characteristic of cost value reconciliation and earned value analysis, and also compare the effectiveness between cost value reconciliation and earned value analysis. Main contractors tend to fail because of poor financial management, especially inadequate attention to cost control. Most of the contractors are lack of knowledge and understanding of cost control system. The application of effective cost control system in construction project is crucial in order to ensuring the success of a project. Cost value reconciliation and earned value analysis will be chosen to lend a hand to contractor in order to control cost. A survey questionnaire is distributed to respondents to investigate the degree of understanding on CVR and EVA; characteristic of CVR and EVA; and the reason choosing CVR and EVA as most effective cost control systems. Data and information collected from survey result are analyze by using descriptive data analysis, frequency distribution analysis and weighted average index. In addition, T – test, two hypothesis sample mean is carry out to test the validity of hypothesis while correlation and regression is carry out to test the strength of relation between two samples. Thus, the research finding is found out the CVR is more preferable than EVA in construction industry.
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CHAPTER 1 INTRODUCTION

1.1 Introduction

The construction industry is increasing in complexity and vigorous competition exists among main contractor, also named as building contractor, in Malaysia. Thus, the effective of cost control system used for a contractor is important in order to monitor and control the project resources to meet the only and vital aim which is profit. Financial problem among main contractors is one of the greatest problems in today’s construction industry due to they do not have the knowledge and lack of the awareness in cost control.

Cash is the most important element in all industry construction, not only construction industry while most of the construction company fail nowadays are due to the lack of liquidity to support their daily process (Park et al., 1995). This is due to the inadequate management of cash flow. In construction industry, most of the items are related to cost for example, plant and machinery, head office and others. It is also said that the majority of the construction companies nowadays encounter failure are due to economic factors.

One of the most important elements for the success of the contractor which is effectively implement of cost control systems. A reliable cost control system can help to accurately identify the expected project financial requirements. Therefore, this study mainly is to identify the importance of cost control and the implementation of cost control systems in construction projects. The cost control systems include cost value reconciliation (CVR) and earned value analysis (EVA). Besides that, this study will compare the effectiveness among the cost control systems which are cost value reconciliation (CVR) and earned value analysis (EVA) to lend a hand to main contractors in assisting to monitor the cost.
1.2 Aim

To compare the effectiveness of Cost Value Reconciliation and Earned Value Analysis to cost control in construction project.

1.3 Objective

1. To identify the degree of understanding of CVR and EVA in construction industry

2. To identify the characteristic of cost control systems – cost value reconciliation(CVR) and earned value analysis(EVA)

3. To compare the effectiveness between cost value reconciliation(CVR) and earned value analysis(EVA)

1.4 Key Question

1. What is the degree of understanding of CVR and EVA in construction industry?

2. What are the characteristic of the cost value reconciliation and earned value analysis?

3. What is the most effective of the cost control systems among cost value reconciliation and earned value analysis?
1.5 Problem Statement

In construction industry, one of the biggest challenges for building contractor is cash flow management. A contractor can still get wiped out even they make an accounting profit. Companies tend to fail because of poor financial management, especially inadequate attention to cost control (Harris et al., 2006). They lack of the knowledge in applying cost control technique. Failure to monitor and control the financial cost for a construction project would cause insufficient cash flow problems or failure of contracting companies which can be reflected on the contractual obligations between client and contractor.

The application of effective cost control system in construction project is crucial in order to ensuring the success of a project. According Dharwadker (1985), cost control can be achieved by selecting the right man for the right job, the right equipment and tools for the right work and the right quality of materials, in the right quantity, from the right source, at the right price and delivered at the right time. However, contractors do not have the knowledge and lack of the awareness of cost control. Therefore, this study is to find out the most effectiveness between cost control systems which are cost value reconciliation and earned value analysis to eliminate main contractor cash flow problem in construction project.
1.6 Rational of Study

Finance has been claimed as the most important resource in the construction process (Mawdesley et al., 1997). Cost control is very importance to contractors to prevent unsavoury consequences of liquidation and bankruptcy of their companies. The main purpose of cost control is to gain a maximum profit that take into the consideration of some elements such as manpower, materials, plants and machineries, satisfactory of works and other related reasons. It is also one of the most fundamental elements and yet the most challenging task in project management for nowadays contractor to survive in the industry.

Among all the construction resources, cost control is one of the most critical tasks since most contractors failed in their business due to lack of liquidity and inadequate control and planning towards the cash flow of their business. Simply stated, contractors go out of business because they run out of money, not because they run out of work. Therefore, implementation of cost control system to cost control is vital in construction project.

1.7 Scope of Limitation

This research focuses on Grade 7 main contractor, also named as building contractor perspective and to compare the effectiveness of cost value reconciliation and earned value analysis to control cost in construction project. This study is limited to Grade 7 main contractor which is based in Klang, Selangor. The information and data will be collected from these contractors for data analysis.
Stage 1 – Literature Review

Initial Literature Review
- Important of Cost Control
- Implementation of cost control system

Critical Literature Review
- Characteristic of CVR
- Characteristic of EVA

Stage 2 – Research Approach & Design

Quantitative Research

Stage 3 – Research Methodology

Population
- Sampling Method
- Sampling Size
- Questionnaires Design

Stage 4 – Data Collection

Postal Survey
- Online/Mail Survey

Stage 5 – Data Analysis

Stage 6 – Conclusion & Recommendation

Stage 7 – Viva