THE MANAGEMENT IN PERFORMANCE OF VARIATION ORDER ON CONSTRUCTION WORK

By

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I hereby declare that I have checked this project and in my opinion, this project is Adequate in terms of scope and quality for the award of the degree of Bachelor of Technology Management (High Tech Marketing) with Honour

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THE MANAGEMENT IN PERFORMANCE OF VARIATION ORDER ON CONSTRUCTION WORK

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Submitted in Partial Fulfilment of the Requirement for the Bachelor of Technology Management (High Technology Marketing)

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DECLARATION OF ORIGINAL WORK

“I hereby declare that the work of this project paper is mine except for the quotations and summaries that have been duly acknowledge”

Signature : 
Name : Rafizah Binti Jamadin
Date : 
DEDICATION

To my beloved family especially my husband and also my family for always support and give motivation for I complete my research. Without all of you, I cannot finish my research successfully.

Thank you.
ACKNOWLEDGEMENT

In the name of Allah SWT, Most Gracious and Most Merciful. All praise belong to Allah SWT for giving me wisdom, strength, support and knowledge in exploring thing, and also make this Final Year Project possible.

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ABSTRACT

This study aims to investigate the relationship between the factors that influence the occurrence of variation orders in construction sites and also to identify the top factor causing variation order. The aim of the study was conducted is based on problems that can be identified by reading the article and journal. The scope of the research is conduct at the company construction work. This study used quantitative research methods. The data will be obtained through the distribution of questionnaires to targeted respondents. The study sample was non-probability. The study sample consist of 113 respondents. The sample selected is based on the Krejcie and Morgan table. Data analysis methods will be measure by using descriptive analysis Statistical Package for Social Sciences (SPSS). Regression analysis to investigate the relationship between independent and dependent variable. This research was founded the element of owner, consultant, contractor and other (IV) was contributed to the performance of variation order (DV). It is prove by the data analysis using correlation and regression that the contractor (r = 0.913, r² = 0.834) more significant element toward performance of variation order, followed by other (r = 0.910, r² = 0.828), owner (r = 0.904, r² = 0.817), and consultant (r = 0.892, r² = 0.817). Indirectly, this study has also achieved three objectives.

Keywords: Variation Order, Construction work, Correlation, Regression, Significant, Performance of Variation Order.
ABSTRAK

Kajian ini bertujuan untuk mengkaji hubungan antara faktor-faktor yang mempengaruhi berlakunya arahan perubahan dalam tapak pembinaan dan juga untuk mengenal pasti faktor utama menyebabkan perintah variasi. Tujuan kajian ini dijalankan adalah berdasarkan kepada masalah yang boleh dikenal pasti dengan membaca artikel dan jurnal. Skop kajian ini adalah pengendalian kerja-kerja pembinaan syarikat. Kajian ini menggunakan kaedah penyelidikan kuantitatif. Data ini akan diperolehi melalui pengedaran soal selidik kepada responden yang disasarkan. Sampel kajian adalah bukan kebarangkalian. Sampel kajian terdiri daripada 113 responden. Sampel kajian yang dipilih adalah berdasarkan jadual Krejcie dan Morgan. kaedah analisis data akan diukurkan dengan menggunakan analisis deskriptif Statistical Package For Social Science (SPSS). analisis regresi untuk mengkaji hubungan antara pembolehubah bebas dan bergantung. Kajian ini telah diasaskan elemen pemilik, perunding, kontraktor dan lain-lain (IV) telah menyumbang kepada prestasi variation order (DV). Ia membuktikan dengan analisis data dengan menggunakan korelasi dan regresi bahawa kontraktor (r = 0.913, r² = 0.834) elemen yang lebih penting ke arah pelaksanaan perintah perubahan, diikuti oleh yang lain (r = 0.910, r² = 0.828), pemilik (r = 0.904, r² = 0.817), dan perunding (r = 0.892, r² = 0.817). Secara tidak langsung, kajian ini juga telah mencapai tiga objektif.

Kata kunci: Arahan Perubahan, Kerja-kerja pembinaan, Korelasi, Regresi, Significant, Pencapaian Perubahan kerja
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LIST OF ABBREVIATIONS

SPSS - Statistical Package for Social Sciences
IV  - Independent Variables
DV  - Dependent Variables
LIST OF SYMBOLS

% - Percent
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CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter will explain about overall the research and will explain why this research will be implement on this study. This chapter will touch about background of research, problem statement, research question, research objective, scope of research, importance of research, limitation of research. From this sub-tittle will explain clears details about research.

1.1 Background of Research

Variation order is meant any increase, substitution, reduction or change in the specifications, drawing or quantity on a contract. Any amendent work can only be executed by the contractor in the event of an official directive issued by the Superintending Officer (S.O). therefore, if the command is issued, the contractor are required to comply. Any Variation work which has been directed by Owner should be measured and assessed by the Superintending Officer (S.O). Assessment rates for
Variation Order should be done with reference to the same rate as those on existing contracts. Should not there for the same price, a reasonable price can be established by agreement between the two (2) parties. For works that can not be measured or evaluated physically, the content in day work can be used. Day work mean, the contractor will be paid in accordance with Schedule day work filled when the contract was signed and supplement with profit. However, the contractor must submit from the copies of vouchers, receipts or payroll books as proof of payment within seven (7) days from the date amendent work instruction (APK) issued. For instance, for the variation order less then ±5% of the contract price will approved by the Executive Director. While for variation order exceed ±5 of the contract price will be approved by Chief Executive Officer. Contract price adjustment will be made on variation order which was approved by the Committee for the payment to the contractor’s work further.

1.2 Problem Statement

The effect of the enactment of variation order will cause an impact on wheather to contract owner, management team and also contractors. Among the problems that often occur are changes in project costs and delay in the delivery of project. Changes in project costs is significant effect is the change in the quantity of the contract either increased or decreased from the original value in contract. When there is a change in the contract, particular the increased value of the contract, the owner must apply for an addition budget to cover the cost of the contract increased from the original value. For delay in the delivery of project is variation Order will result in an increase in employment in construction work. In this case, the contractor is entitle to seek additional time to complete the contract work/project. So that, from the problem statement, the researcher try to find ways or to solve this problem with identify what the potential cause that make variation order happen in construction...
work/project. Therefore, researcher also wants to find out the effect of variation order to construction work/project.

Referring to engineering projects at FGVPM in 2013, a total of 278 tenders engineering fields. Of that amount, 72.3% of total employment contract has change resulting from the variety of factors.

<table>
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<th>No.</th>
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<th>%</th>
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<tr>
<td>1</td>
<td>No change</td>
<td>77</td>
<td>27.7</td>
</tr>
<tr>
<td>2</td>
<td>Has changes</td>
<td>201</td>
<td>72.3</td>
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Table 1.0: Statistical Variation Order in Construction Work

Sources : Felda Global Ventures Planstations (Malaysia) Sdn. Bhd

1.3 Research Question

In this research, the focus is to determine what causes that variation order will happen and what the effect to the project from variotion order. So, this research explored the following key question:

1. What are the causes that will make variation order happen in the construction work/project?
2. Which is the top causes of variation order happen on construction work/project?
3. What are the related these research for an effective solution to minimize the variations order?

1.4 Research Objective

The objectives of this study basically is to investigate the potential causes that will make variation order happen in construction work/project and also what are the effect if variation order happen in construction work/project. The objective of study are state as below

1. To investigate potential causes that will make variation order happen in construction work/project.
2. To identify the top causes of variation order happen in construction work/project.
3. To study the related these research for an effective solution to minimize the variations order.

1.5 Scope of the Research

This research will be conducted on the parties involved with the engineering contract in construction fields in Malaysia. Respondent is estimate in this study are 100 people. The respondent consist Project Manager, Project Engineer, Assistant Engineer, Technician, Client (Estate Manager), Consulting Engineers and Contractor. The respondent is totally contributes in construction work/project. So that,