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**THE IMPLICATION OF VARIATION ORDER IN COST  
OVERRUNS IN CONSTRUCTION PROJECT**

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## **ABSTRACT**

The most common cause of cost overruns is in the construction sector. Cost overruns are a problem for business or construction financing in the construction sector. The purpose of this study is to concentrate on the appropriate methods for managing cost overruns in variant orders. The specified aim was addressed in the survey questionnaire design. Due to the damage that cost overruns due to the construction sector, it has had an impact on the contractor's finances. Additionally, research the effects of cost overruns on the building sector and discover methods to lower them. So, there are a few problems that can happen with construction work, especially with variation orders, which can lead to cost overruns for the contractor. The goal of this study is to find ways to reduce the chance of construction projects going over expense. But the goals of this research are to find out what the main reasons are for variation orders in construction projects, to find out what effect variation orders have on construction projects, and to suggest ways to reduce the risk of cost overruns in construction projects. The quantitative method is also used in this study. The sample size for this study was determined by CIDB and Krejcie & Morgan, who used a sample size of 196. The results from 196 G7 contractors in Hulu Langat District about how variation orders affect construction projects in Malaysia from the contractors' point of view. Aside from that, the purpose of this study is to find out how contractors can reduce the risk of cost overruns and make suggestions about how to do that. Cost overruns in Malaysian construction projects are usually caused by variation orders by the contractor, the client, or the consultant. To avoid or reduce cost overruns, the contractor should do background research before starting construction. The study is important because it gives contractors a chance to talk about how to reduce cost overruns.

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# CHAPTER 1

## INTRODUCTION

### 1.1 INTRODUCTION / BACKGROUND OF RESEARCH

Construction industry in Malaysia has widely grown and highly demand for the country. Malaysia have faced many challenges in construction in many of aspects such as the rising cost of materials, adopting new technologies in construction and other challenges that construction facing, but the latest challenge that Covid-19 that globally we are facing. One of the major problems facing the construction project is issue of variation order during the construction phase (Mohammad, et al., 2017). A variation order, also known as a change order, is a change to the scope of work, planning, specifications, or contract documents in a construction project. The construction cost is one of the most important elements impacting the construction business. When variation order is issued, contractors are inclined to charge at a higher rate for the work changes, thus affecting the client's budget(Mohammad & Hamzah, 2019).

This change of work is inevitable in any construction project and this problem can become more serious when the variation order causes work progress to be impaired as a results of the increased in the construction time and cost that affects the construction industry in Malaysia (Mohammad & Hamzah, 2019). The excess of actual expenses over the agreed budget is referred to as a cost overrun. It's a common occurrence in infrastructure, building, and engineering projects. Indeed, many huge projects carried out in contractors