



Contributing Cost Variation Factors in Highway Projects

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Abstract

Cost overrun is known as when the final cost of any project surpasses the sectioned cost of the project at the floating of tender. Cost overrun or cost variation overrun is the main problem in the construction of highway projects in Sindh Province of Pakistan. To attain the main objective of the research a literature review was conducted and 64 general factors of cost overrun were found in construction industry. A questionnaire was developed and distributed among 28 well experienced experts having maximum experience in construction of building projects. Gathered data was analyzed by method of average index. Results shows that main and causative factors of cost variation were financial and cash issues faced by owner, slow information between parties, change in price of material, delay of design, poor site management, payment and financial issues problem faced by the contractor and delay in decision making. This research can help petitioners of highway projects to overcome these main and causative factors of cost.

Keywords: Cost Variation; Contributing Factors; Highway Projects; Pakistan.

1. Introduction

The construction industry is known as main industry among all industries which plays an important and vital role in growing the economy of the country. It also contributes positively to the development of Gross Domestic Product (GDP) as well as in employment of labor forces. The construction industry has improved life standard by delivering infrastructures like hospitals, buildings, schools and other facilities. Hence, it is quite difficult to complete the project within approved cost, time and standard quality. Of these, cost overrun is found as a major issue because it affects the economy of any country [1, 2]. According to [3] Chen et al. (2016), investigated cost overrun in 418 design and build projects, the results showed that more than 50% of the projects had cost overrun. Cost overrun creates the issue of litigation, cash flow issues, mistrust and arbitration in construction projects [4]. According to [5] that most projects are affected by the cost overrun and out of 10 projects, 9 projects have faced cost overrun. This cost overrun issue is found as dominant in construction in all developing countries where this cost overrun almost exceed more than 100% of the estimated [6]. Factors which causing cost overrun vary from country to country because of the changes in political, economic, environmental and social conditions [7]. The current literature review shows regarding the importance of cost variation and its impact on construction projects. Many research has been conducted out to find out cost variation factors in construction projects but not a single study has been carried out to identify main factors of cost variation in highway

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