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Risk Factors Affecting Construction Project Cost in Oman

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Abstract: Construction projects are always subject to risks and uncertainties due to its unique and dynamic nature, outdoor work environment, the wide range of skills employed, various parties involved in addition to situation of construction business environment at large. Altogether, these risks and uncertainties affect projects objectives and lead to cost overruns, delay, and poor quality. Construction projects in Oman often experience cost overruns and delay. Managing these risks and reducing their impacts on construction cost requires firstly identifying these risks, and then analyzing their severity on project cost to obtain deep understanding about these risks. This in turn will assist construction managers in managing and tacking these risks. This paper aims to investigate the main risk factors that affect construction projects cost in the Sultanate of Oman. In order to achieve the main aim, literature review was carried out to identify the main risk factors affecting construction cost. Thirtythree risk factors were identified from the literature. Then, a questionnaire survey was designed and distributed among construction professionals (i.e., client, contractor and consultant) to obtain their opinion toward the probability of occurrence for each risk factor and its possible impact on construction project cost. The collected data was analyzed based on qualitative aspects and in several ways. The severity of each risk factor was obtained by multiplying the probability occurrence of a risk factor with its impact. The findings of this study reveal that the most significant risk factors that have high severity impact on construction project cost are: Change of Oil Price, Delay of Materials and Equipment Delivery, Changes in Laws and Regulations, Improper Budgeting, and Contingencies, Lack of Skilled Workforce and Personnel, Delays Caused by Contractor, Delays of Owner Payments, Delays Caused by Client, and Funding Risk. The results can be used as a basis for construction managers to make informed decisions and produce risk response procedures and strategies to tackle these risks and reduce their negative impacts on construction project cost.

Keywords: construction cost, construction projects, Oman, risk factors, risk management

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