

Minimising The Delay Factors On Construction Projects: A Local Case Study In Kuwait City During Covid-19

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Abstract:- This paper has been prepared to explore the necessary planning to minimise delay factors on construction projects in Kuwait during Covid-19. The data was obtained through face-to-face interviews. A case study was performed at West of Abdullah Al Mubarak in Kuwait, identifying the major causes of delay on the project. The delay factors of the project were gathered from the project manager and the study found the main delay factor was addressed and minimised by proper planning methods.

Keywords:- Case study, Covid-19, Construction projects, Kuwait, Delay factors, Face-To-Face interview.

Introduction

Generally, the delay in the construction sector is defined as a “time overrun after the completion of a contract or beyond the date agreed upon by the parties for delivery of the project”. Delays in the construction sector are considered as a global phenomenon. For this reason, they must be controlled and the delays in the construction sector can be minimised by proper planning.

In the literature, there are several studies investigating the causes and effects of delays on construction projects from various countries and they suggested methods to minimise them. For example, 83 causes of delays on construction projects in Turkey were identified followed by some of the recommendations below:

- Delivery of materials to the site must not be late.
- Supervision and site management must be done correctly.
- The contractors must have experience before the bidding stage.
- Subcontractors in a large project must complete the project on time.
- Inexperienced workers could lead to inefficient work during construction.
- Construction sites must receive deliveries of materials and approve the design documents as soon as possible after a project is awarded and payments must be made on time.
- Proper coordination and communication between the various parties must be prepared during each phase of construction.
- The owner of the project must make decisions as quickly as possible in order to complete the project on time.
- Changing orders often disrupts work due to the failure to fully analyse the project in its initial stages.
- The contractors must make effective plans and schedules during construction.

Moreover, 26 causes of delays on construction projects in Ghana were identified followed by some suggestions below:

- Regular payment must be considered to contractors for any work that is done.
- Personnel knowledge must be updated by training programmes in order to improve contractors’ managerial skills.
- The material procurement process must be organised properly in order to avoid supply delays.
- Training programmes such as project planning, time scheduling, information systems, and cost control must be carried out to create effective and efficient technical performances in the groundwater industry.

- There should be adequate contingency allowance in order to cover increases in material costs due to inflation.

Furthermore, a previous study reported that there are delays on construction projects in Kuwait due to the covid-19 pandemic. The causes of the delays were investigated. This paper aims to explore how to minimise the causes of delays on construction projects in Kuwait during covid-19. The objective was to gather the information from project managers working on specific projects in Kuwait, to be achieved through face-to-face interviews.

Research Methodology

From the literature review, 17 causes of delays on construction projects in Kuwait were determined during covid-19. Hence, real case studies were selected in this research methodology with face-to-face interviews with project managers in order to find the proper planning methods to minimise delay factors on construction projects in Kuwait. The face-to-face interviews were conducted between 10 August to 20 September 2020 during covid-19. From several construction projects in Kuwait, only one project manager was allowed to complete the face-to-face interview and, as a consequence, the data collected is limited.

Case Study

The case study is one of the projects underway at West of Abdullah Al Mubarak in Kuwait. A contract was signed between the main contractor and the owner (Public Authority For Housing Welfare) to construct, complete and maintain 29 public buildings, including schools, a clinic, a police station and several mosques as well as a building to house a market and a community development building. The project was due to run from December 2017 to May 2019 but has been delayed by 24%. and is still not completed.

Discussion

A previous study indicated that there are critical delays on construction projects in Kuwait due to covid-19 and it identified the causes of delays on construction projects in Kuwait during covid-19. The most common reason for delay was that employees were unable to work because of government restrictions due to the pandemic. Whilst this cause was beyond the control of the owners and the contractors it is particularly important to understand how other causes of delay can be minimised, and the previous study detailed other reasons for delay, as did the studies in the literature review.

Therefore, this current research study looked in particular at the project at West Abdullah Al Mubarak in Kuwait which was delayed by 24%. The main reason was found to be due to delay from the main contractor who was delaying payments to the subcontractors. In order to address this issue, a meeting was arranged between the main contractor and subcontractors in the presence of the project manager for the Public Authority For Housing Welfare to evaluate what subcontractors had completed so far for the project (i.e. slabs, walls, and columns, etc.) This led to a monthly clearance letter being provided by the main contractors for the owners. In this way the owner was able to make payment directly to subcontractors, and work could continue. This relatively simple solution is an example of how proper communication and coordination can help to analyse the reason for delay and thus come up with a method to reduce those delays.

Limitation

There is a limit to my research in that many project managers were not allowed to share their planning in terms of causes of delays in construction projects. As a result the conclusion drawn cannot focus on all possible reasons for delay, but importantly, the value of proper communication and coordination was made clear.

Conclusion

Delays in construction projects can be minimised with proper planning, including proper communication and coordination, and regular payments to contractors. The aim of this paper was to explore how to minimise delay factors on construction projects in Kuwait during

covid-19. To do that, a real case study was conducted on a construction project in Kuwait. The research methodology used was a face-to-face interview with a project manager work on a project at West of Abdullah Al Mubarak in Kuwait who stated that the project was delayed by 24%. The reason for the project delay was the main contractor was delaying payments to the subcontractors. By bringing all parties together, the owners, main contractor and sub-contractors, it was possible to resolve the issue. Further research is required by supporting and encouraging researchers in various government agencies in order to collect information that can reduce the delays in construction projects.

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