

Causes of delay in large construction projects

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Abstract

A survey on time performance of different types of construction projects in Saudi Arabia was conducted to determine the causes of delay and their importance according to each of the project participants, i.e., the owner, consultant and the contractor. The field survey conducted included 23 contractors, 19 consultants, and 15 owners. Seventy-three causes of delay were identified during the research. 76% of the contractors and 56% of the consultants indicated that average of time overrun is between 10% and 30% of the original duration. The most common cause of delay identified by all the three parties is “change order”. Surveys concluded that 70% of projects experienced time overrun and found that 45 out of 76 projects considered were delayed.

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1. Introduction

In construction, delay could be defined as the time overrun either beyond completion date specified in a contract, or beyond the date that the parties agreed upon for delivery of a project. It is a project slipping over its planned schedule and is considered as common problem in construction projects. To the owner, delay means loss of revenue through lack of production facilities and rent-able space or a dependence on present facilities. In some cases, to the contractor, delay means higher overhead costs because of longer work period, higher material costs through inflation, and due to labor cost increases.

Completing projects on time is an indicator of efficiency, but the construction process is subject to many variables and unpredictable factors, which result from many sources. These sources include the performance of parties, resources availability, environmental conditions, involvement of other parties, and contractual relations. However, it is rarely happen that a project is completed within the specified time.

2. Objectives of the study

The main objectives of this study include the following:

- To identify the causes of delays in construction in Eastern Province of Saudi Arabia.
- To test the importance of the causes of delay between each two groups of parties.
- To study the differences in perceptions of the three major parties in any constructions, namely, owners, contractors and consultants.

3. Literature review

Many articles and studies conducted on causes of delay in construction projects, both locally and internationally have been reviewed. Surveys conducted by Assaf et al. [4] outlined 56 main causes of delay in large construction projects. Delay factors are assembled into nine major groups with different levels of importance to different parties. Al-Ghaffly [2] discussed the delay in public water and sewage projects. Sixty causes were identified and classified. Al-Ghaffly [2] concluded the following: the delay occurred

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