Available online at www.CivileJournal.org

Civil Engineering Journal

Vol. 6, No. 3, March, 2020

Delay Factors in Building Construction Project of State Elementary School

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Received 11 November 2019; Accepted 28 January 2020

Abstract

The state elementary school No.027 building construction project in Samarinda Ulu District, Samarinda City, Indonesia, in the 2019 fiscal year, which experienced delays, was allegedly due to the use of inappropriate scheduling methods. Therefore, to overcome these delays, it must use the curtain methods that are appropriate with efficient cost. In this study, we used factor analysis and multiple linear regression methods to measure answers from a questionnaire distributed to 45 respondents like consultants, contractors, and owners who were involved in the state elementary school in above. The results show that the elements that influence the delay in the construction of state elementary school building No.027 Samarinda is a factor in the work scheduling method and construction delay. For Scheduling work get a coefficient value is $t_{table} = 7{,}575 > t_{table} = 2{,}026$, and for construction delay method get a coefficient value is $t_{table} = 3{,}120 > t_{table} = 3{,}120$. It can be concluded is the most dominant factor construction delay in the State Elementary School No.027 Samarinda in case above is the Work Scheduling Method with a value coefficient is 1.057.

Keywords: Delay Scheduling Factors; Scheduling Method; Building Construction Project.

1. Introduction

The building construction project has a complicated working process that can influences planning, controlling, and supervision [1, 2]. One of the issues that should be deemed in implementing the construction project is building delay. This is caused by several factors including less commitment; inadequate management of construction site; lack of site coordination; inappropriate scheduling; less clarity of construction scope; poor communication; and inadequate contract [3].

In our observation, a lot of projects have been done for the construction project of government school buildings in Indonesia is also delayed in its implementation caused by a lack of competent resources in its fields, so that, the government, contractors, and consultants have to change the existing and usual implementation process of building construction project that has been carried out so far. Thus, indications of construction delay factors such as financial constraints (Doloi et al. 2012) [3], human resources (Yang et al. 2010) [4], scheduling methods such as work plans that are not well-structured (Assaf and Al-hejji 2006 [5]; Hossain et al. 2019 [6]; Yau and Yang 2012 [7]; Yang et al. 2010 [4]), implementation methods related to failures the contractor in carrying out the work (Feyzbakhsh et al. 2017 [8]), design changes involving incomplete drawings and specifications (Yau and Yang 2012 [7]), material availability (Assaf and Al-hejji 2006 [5]; Yang et al. 2010 [4]), shortage of equipment (Assaf and Al-hejji 2006 [5]) can be anticipated.

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http://dx.doi.org/10.28991/cej-2020-03091488