ABSTRACT

In this researche of renovation project which has a work duration of 90 working days. This project is carried out by PT XYZ which is engaged in construction and telecommunications. However, in the implementation of the renovation project there is a real progress that is not in accordance with the planned progress at the beginning of the project and is caused by amendment work with a duration of 40 working days starting on February 10, 2020.

Based on data obtained on renovation work, crashing can be done by determining activities that are on critical paths to speed up the duration of work. The analytical method used is by comparing the Time Cost Trade off method, accelerating the duration of work based on increasing the number of workers or adding working hours (overtime). The analysis was carried out to determine the productivity of workers who produced the fastest duration and the smallest additional cost by comparing the two methods. In this study has an output that is acceleration can be done by adding 25% of normal workers and the maximum acceleration duration for 21 days with a cost slope of Rp 6.150.000 while adding 3 hours of work duration of normal duration results in a maximum acceleration of 3 days work with a cost slope of Rp 2.386.091. With this result, PT XYZ will accelerate the duration renovation project by increasing work hours (overtime) by 3 hours from the normal duration.

Keywords : *critical path method, cost slope, crashing, time cost trade off*