ABSTRACT

This research was conducted to create a Management Information System for Monitoring the Progress of Construction Work at PT PLN UP3 Metro City. The problem that has occurred so far is that the performance process at PT PLN UP3 Metro is still using simple data processing tools such as Microsoft Excel and sending work progress reports (LKP) is still through a short message application. This causes an increase in the time needed for data transportation so that monitoring activities for work progress do not run optimally. In addition, several problems were also experienced by PT PLN UP3 Metro such as time problems in project work that could not be known quickly and in real time.

From the problems above, this research will create a Management Information System for Monitoring the Progress of Construction Works using the Laravel framework and the Extreme Programming method. To find out the feasibility of the system created, a feasibility test will be carried out on two users, namely supervisors and executors. Based on the results of tests carried out using the Black Box Testing method and ISO 9126 testing on the operational usability sub-factor and using 7 respondents consisting of 6 supervisors and 1 executor.

Based on the results of the feasibility testing of the usability operational sub-factor, namely supervisory users who achieved a score of 100% and testing of executors who achieved a value of 100% so that the division of usability operational aspect categories according to the range of quality criteria for usability aspect testing was included in the "Very Eligible" category this system will be used in PT PLN UP3 Metro City.

Keywords: WebView, Laravel, Extreme Programming, Black Box Testing, ISO 9126