ABSTRACT

PT Construksi Total Mandiri faces problems in project monitoring because the system is not integrated, causing data to be scattered and reporting daily records with paper or Excel can result in negligence in storing data. The increasing number of projects makes managing budgets and resources increasingly complex. The company needs an integrated monitoring system that is easily accessible to improve the efficiency of project management.

The design of the construction project monitoring dashboard at PT Construksi Total Mandiri uses user centered design (UCD). The UCD method consists of five stages, namely understanding the user context by identifying business processes and stakeholders, determining user needs by identifying functional and nonfunctional needs, creating design solutions by creating, finally evaluating which is done by verification, validation, and usability testing.

On the results of dashboard verification and validation of user needs. After that, usability testing was carried out, the usability test results concluded that, the effectiveness test results obtained a total effectiveness result of 77.83% with high effectiveness. The results of efficiency testing based on the calculation of Overall Relative Efficiency amounted to 70.8% with high efficiency. The results of satisfaction testing obtained the final score of the system usability scale of 63.75.

By adapting the monitoring dashboard, PT Construksi Total Mandiri can solve the problem of scattered project data, reduce errors in reporting, and simplify resource monitoring, thereby improving the efficiency and effectiveness of project management.

Keywords: Dashboard, key performance indicators, monitoring, real-time, usability