ABSTRACT

PT. XYZ is one of the companies engaged in the field of information technology. PT. XYZ has a variety of projects that are being carried out both internal projects related to the functionality aspect and external projects as wholesale. In this study, the project focus of PT. XYZ is the creation of a state civil management application. The procurement project of the state civil apparatus management application carried out by PT. XYZ aims to create an Application System that can support business processes contained in the State Civil Apparatus Personnel Management (ASN) and integrate staffing data and information in Central and Regional Agencies. Based on the data from the interview, it is known that the procurement project of the state civil apparatus management application is divided into two parts, namely the performance management section and the personnel management section. The construction work of this application is estimated to take 4 calendar months, starting from March 2021 and ending in July 2021. During the work process based on the summary report, most project activities experienced known delays due to risks that have not been fully identified and the lack of monitoring and controlling of the project, especially in the personnel management department. In addition, this project is also forced to be carried out by BAST because this project is a government project that is difficult to amend but there is still a development process that has not been carried out so that currently the project will be carried out a further development process for unfinished work. The solution given in this final project is to design a monitoring and controlling dashboard for the project using the plan driven (Waterfall) method. The dashboard design carried out aims to solve these problems so that the project can be monitored in real time and can be completed on time.

The results of the monitoring and controlling dashboard design will include the main dashboard page containing the S curves, CPI and SPI graphs, and navigation to each worksheet on the dashboard consisting of a work list worksheet, timeplan, weekly report, and performance report. In this study, to analyze the performance of project performance using the earned value management (EVM) method. The EVM method is a method in project management that is used to measure project performance using time and cost aspects. The data used in this study are project charters, baseline scopes, project schedules and draft cost budgets (RAB).

The results of the performance index analysis showed that the project performance on the PT XYZ project was still not good, where in the 16th week the project SPI value was 0.86 and the project CPI value was 0.76. This value can be interpreted to mean that the implementation time is longer than planning and the project is overbudget. On the other hand, it was found that the value of the project TCPI was 1.08 which means that the remaining work on the project is predicted to be completed with an efficiency of 1.08. The result of the calculation of the estimated cost for project completion is Rp 148.216.939 with an estimated completion time of 19 weeks which shows that there is an additional completion time from the initial planning, which is as much as 3 weeks. This delay is caused by various factors, namely poor detailed project planning and lack of coordination between project teams.

The results of the design are then validated by applying directly to the project team's procedures then using a checklist form containing the validation of dashboard features given to the project team. To find out whether the design results are feasible to be implemented on the project or not, a feasibility analysis of the implementation of the design is carried out. The feasibility analysis of the implementation of the design refers to the results of discussions with the project team and the results of design validation. The feasibility analysis of the implementation in this final project uses 4 indicators, namely the platform, total users, feature flexibility, and price. Based on the comparison of different platforms with 4 indicators and the results of discussions with the project team, it can be determined that the dashboard platform is feasible to implement. Based on the implementation feasibility analysis, the platform used must have high flexibility and low prices so that the use of the dashboard is determined using a spreadsheet. From the results of the analysis of the use of the monitoring and controlling dashboard of the project supervision and control process, it was found that the dashboard can assist project managers in carrying out the project supervision and control process in real time so that if there is a discrepancy, improvements can be immediately evaluated.

Keywords: *Dashboard, Monitoring, Controlling, Project, Waterfall, Earned Value,* CPI, SPI