ABSTRACT

ABC University is one of the private universities in West Java that wants to improve the quality of lectures. To support the improvement of academic quality, ABC University wants to develop an integrated education information system. The development of an integrated education information system is carried out in the form of a project that requires an OPQ Information System Development Company in the work process. OPQ Information System Development Company is one of the technoparks engaged in technology and information. The OPQ Information System Development Company has experience in developing software and hardware in accordance with the capacity and standards of the OPQ Information System Development Company. ABC University's information systems development project has several programs in it. The ABC University Integrated Education Information System Development Project consists of 37 programs and the work is divided into 10 Teams. However, the ABC University Integrated Education Information System Development Project was delayed in September 2021. The ABC University Integrated Education Information System Development Project had to do some planning. This affects the entire project such as deadlines, resources to the final planned results. The delay that occurred in the ABC University Integrated Education Information System Development Project was due to the absence of a baseline or project basis so that the ABC University Integrated Education Information System Development Project was without direction and play. Because there is no direction and project, the activities in the ABC University Integrated Education Information System Development Project are unstructured and project achievements are not defined where it can affect performance or work performance. With the reality experienced by the Integrated Education Information System Development Project, the project team decided to do a re-planning in December 2021. The condition of the project that was already experiencing delays, the ABC University Integrated Education Information System Development Project needed additional resources, namely Team 11 which saved in support and control. Until now, some of the baselines of the 37 programs have not been designed in detail. The delay in the project was also supported by other factors, namely the lack of resources and the low level of communication between stakeholders. So that there are alternative solutions to these problems, such as adding resources, improving communication, designing scope baselines, schedule baselines and measuring performance.

In writing this final project, the whole design is compared to the theory. It is useful to know the method taken is a superior method compared to the previous methods. Scope Baseline design is done using Decomposition after comparison with Rolling Wave Planning Method. Baseline schedule design is done using the Critical Path Method after comparison with Resource Optimization and Schedule Compression. Meanwhile, performance measurement is carried out to measure project performance in terms of worker productivity, the progress of each project team and others related to the level of project work rate. Performance measurement is carried out using EVM or Earned Value Method which will be visualized using the S Curve. From the performance measurement, the project team can also perform calculations on the schedule variance which serves to provide information on how far the project has been delayed, the schedule performance index which serves as one of the variable in work efficiency and time estimate which functions in providing information in the form of an estimated time when the project will be completed. In addition to solving the problem of delays, all the designs and measurements carried out can also serve as a form of anticipation so that the project does not experience further delays in the future.