ABSTRACT

The development of information technology requires every organization to be able to adapt to maintain the prospect of the organization in the long term, but the application of information technology must have a concept and must be directed, one method to help implement technology properly which can be applied by enterprise architecture (EA). EA is an artifact design work, a document that is relevant to describe the company at the present time and in the future in the context of systems and information technology. However, many companies are not optimal in implementing EA such as business process modeling problems that requires the correctness and accuracy of the model according to the scenario. Therefore, it is necessary to test the business process model using BPMN which can be analyzed through the verification and validation process using the model validation process. Using this model, the people must check the business process twice because it is accurate and precise will be the truth.

Testing using the model validation process is divided into 3 steps. Step 1 is about problem entities doing checks with schedule using critical paths and dependencies with the help of the Wrike tool. Step 2 is about the conceptual model with a guide to creating an Entity Relationship Diagram (ERD) to check using scenario analysis and state graph analysis. Stage 3 is about the computerized model by checking using the Petri Net modeling language with the help of the WoPeD tool with structural analysis and health testing. This research will produce an analysis of the errors that occur and the incompatibility of business processes from the results of the verification and validation process testing and find out the impact that will occur in a company if the process being tested has not been properly verified and validated.

Keywords— ***Enterprise Architecture, proses bisnis, verifikasi, validasi, critical path, dependencies, wrike, scenario analysis, state chart analysis, structural analysis soundness, Petri Net, WoPeD***