

## **ABSTRACT**

The Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 109 of 2013 Article 1 regarding electronic learning (E-learning) is to utilize information and communication technology-based information packages for learning purposes so that students can access it anytime and anywhere. Einstein had an actual business process problem. Currently, Einstein does not have an E-learning system to convey learning information to students. This learning system is still manual. The manual condition has problems with the learning system because the activities of the teacher, admin, and students do not have a system that is integrated with one another to storage in the database. The research objective provides an actual business process to improve into a proposed business process by designing an E-learning system based on web development using the waterfall model. The research was conducted to design a feature framework according to Einstein's needs. This study has an indicator of success by conducting interviews with the founder at Einstein

The research data collection use observation and interview. This research used waterfall methodology consist requirement analysis, system design, coding, and testing to build a framework for Einstein. The research will be designed an E-learning system has correlation to integrate five components or sub-systems including man, time, method, machine or equipment, and information. These five components have the objective of specifying, predicting, and evaluating the results obtained from the integration system. The system designed to increase added value in the form of tutoring services. The actual business process result has 3labor still use manually to operate learning and administrative process. The proposed business process to help the documentation learning system and administrative process will update in real time cause using E-learning. The results of the study were E-learning testing include black-box and User Acceptance Test (UAT) to find out which system is designed according to the needs of Einstein.

The result admin, student, and teacher framework can successfully operate menu and feature about learning and administrative process in E-learning system. However, the E-learning system has advantages and disadvantages for access rights to operate it

Keywords – Business Processes, E-learning, Einstein, Integral Systems, Gap Analysis, Waterfall Model.