ABSTRACT

APPLICATION OF RAPID APPLICATION DEVELOPMENT (RAD) METHOD IN DESIGNING A WEBSITE-BASED INVENTORY INFORMATION SYSTEM

(Case Study: Banyumas District Education Office)

Oleh

Muhammad Fadhil Zahran 20103100

Inventory management in the modern era is an urgent need along with technological advances. Maintenance of real-time information standards, data security is a top priority, and efficient data integration are important aspects of inventory management. Unfortunately, the Banyumas Regency Education Office still relies on manual methods in managing their asset inventory. This causes constraints in the speed of access and overall data monitoring. The use of manual methods also has negative impacts, such as a lack of updates to inventory changes, potential data loss, and a lack of relevant information. The solution to overcome the gap between ideal expectations and reality, the necessary step is the use of technology in inventory management. One of the concrete steps that can be taken is to design a website-based inventory information system using the Rapid Application Development (RAD) method. This system is expected to be able to increase the efficiency and effectiveness of inventory management by presenting accurate, real-time, and integrated information. As a result, the use of this technology is expected to improve existing constraints, such as the speed of data access, better inventory monitoring, and avoid potential data loss. The implementation of a website-based inventory information system can also provide a solution to the lack of updates to inventory changes, because information can be updated quickly and easily. In addition, data security, which is prioritized in the design of this system, can overcome the risk of potential data loss. Provision of relevant and integrated information. RAD aims to accelerate the development of information systems through three stages: Requirements planning, RAD Workshop Design, and Implementation. This research resulted in an Inventory System website that can be accessed by three actors: Admin, Staff, and Field Heads, helping to transition from manual management to a computerized and integrated system. The functionality test with Black Box Testing showed that the system was running as expected, and the User Acceptance Test resulted in a score of 78%, so it can be concluded that the User Acceptance Test (UAT) test on the Banyumas Regency Education Office Inventory Information System website can be well accepted.

Keywords: Black Box Testing, Banyumas Regency Education Office, Inventory Management, RAD, User Acceptance Test, Website.