ABSTRACT

In the modern era, the implementation of *web*-based information systems is crucial to enhancing the operational effectiveness and efficiency of an organization. Bandung Flying club, an aviation club in Bandung, faces several issues with fuel stock management and flight reservation processes that are still conducted manually. This often leads to data inaccuracies, delayed information, and inconvenience for club members. Therefore, the development of a *web*-based management information system is a relevant and urgent solution to be implemented.

The developed application is a *web*-based management information system designed to facilitate fuel stock management and flight reservation processes at Bandung Flying club. This application is built using the PHP programming language with the Laravel framework and MySQL database. The main features of this application include real-time fuel stock management, automation of flight reservation processes, and the provision of clear and integrated flight schedule information. Additionally, the payment method uses the Midtrans API to facilitate secure and fast financial transactions.

Testing results indicate that this application significantly improves the operational efficiency and effectiveness of Bandung Flying club. The use of this application reduces errors in fuel stock management and speeds up the flight reservation process. this application not only provides convenience for club management but also enhances the experience of members in making flight reservations. The implementation of this information system is expected to serve as a model for other aviation clubs in adopting technology to optimize their operations.

Keywords: information system, stock management, flight reservation, *web* application, PHP, Laravel, Midtrans