ABSRTACT

This research aims to design and implement an ERP system based on Odoo at Rumah Merah Heritage Lasem, a business unit managing a restaurant and hotel. Rumah Merah Lasem faces challenges in operational management and accounting, which is still done manually, risking inaccurate stock recording, slow ordering, and unintegrated transaction recording. Therefore, implementing an ERP system is expected to optimize business process management, increase efficiency, and accelerate operational workflows in both business units.

The research methodology used is the *Design Science Research* (DSR) approach, with a system development model based on the *QuickStart* method focused on implementing the ERP system using Odoo. The research process begins with business need analysis and system design, followed by the configuration of key modules such as *Purchase*, *Sales*, *Inventory*, *Point of Sale (POS)*, and *Rental*. The system was tested using *Blackbox Testing* to ensure that the system works as intended.

The results of this study show that the implementation of the Odoo ERP system at Rumah Merah Lasem successfully integrated various business processes that were previously separate, such as order management in the restaurant and hotel rooms. The integrated *POS* module, connected directly to the payment system and kitchen display, allows for faster and more accurate transaction recording. The *Purchase* and *Inventory* modules also successfully manage procurement and stock updates automatically, which were previously done manually, reducing errors in recording and increasing transparency.

Although the ERP system implementation has yielded positive results, this study suggests that Rumah Merah Lasem develop forecasting features in the *Procurement* module to predict future raw material needs based on historical data and demand trends. Additionally, it is recommended to enhance the integration of digital payment systems to speed up transactions and provide more convenience for customers. With further development, the ERP system is expected to continue supporting growth and operational efficiency at Rumah Merah Lasem.

Keywords— ERP, Odoo, Operational, Accounting