

ABSTRAK

Manajemen inventory merupakan aspek penting dalam operasional usaha ritel yang berpengaruh terhadap ketersediaan barang dan kelancaran proses penjualan. Toko Rajawali masih menghadapi permasalahan dalam pengelolaan persediaan barang yang dilakukan secara manual, seperti ketidaksesuaian data stok, kesulitan dalam memantau barang kedaluwarsa, serta keterlambatan dalam pengambilan keputusan pembelian. Penelitian ini bertujuan untuk merancang dan membangun sistem informasi manajemen inventory ritel berbasis web menggunakan metode Rapid Application Development (RAD). Sistem dikembangkan berdasarkan hasil observasi, wawancara, dan studi literatur, serta disesuaikan dengan kebutuhan operasional Toko Rajawali dengan fitur utama meliputi pengelolaan data produk dan kategori, pencatatan pembelian dan penjualan, pengelolaan stok berbasis *batch of stocks* dengan metode *First Expired First Out* (FEFO), stock opname, notifikasi stok minimum, serta penyajian laporan stok, pembelian, dan penjualan. Hasil pengujian menggunakan metode *Black Box Testing* menunjukkan bahwa seluruh fungsi sistem berjalan sesuai dengan kebutuhan, sehingga sistem diharapkan dapat membantu pemilik toko dalam memantau persediaan secara real time dan mendukung pengambilan keputusan bisnis secara lebih akurat.

Kata Kunci: manajemen *inventory*, sistem informasi, ritel, FEFO, *Rapid Application Development*

ABSTRACT

Inventory management is a crucial aspect of retail business operations as it directly affects product availability and sales performance. Rajawali Store still faces challenges in managing inventory manually, such as stock data discrepancies, difficulties in monitoring expired products, and delays in making purchasing decisions. This study aims to design and develop a web-based retail inventory management information system using the Rapid Application Development (RAD) method. The system was developed based on observations, interviews, and literature studies, and tailored to the operational needs of Rajawali Store, with main features including product and category management, purchase and sales recording, batch-based stock management using the First Expired First Out (FEFO) method, stock opname, minimum stock notifications, and inventory, purchase, and sales reporting. The results of Black Box Testing indicate that all system functions operate according to the specified requirements, and the system is expected to assist store owners in monitoring inventory in real time and supporting more accurate business decision-making.

Keywords: *inventory management, information system, retail, FEFO, rapid application development*