

ABSTRAK

Fandy Galih Saputra. 2026. Rancang Bangun Sistem Informasi Penjualan Dan Persediaan Barang Berbasis *Website* Pada Toko Pakaian Brad. Skripsi. Program Studi Teknik Informatika, FT, Universitas PGRI Madiun. Pembimbing (I) Sri Anardani, S.Kom., M.T. (II) Slamet Riyanto, S.T., M.M.

Toko Pakaian Brad merupakan usaha retail pakaian yang dalam kegiatan operasionalnya masih mengandalkan pencatatan secara manual, sehingga menimbulkan berbagai permasalahan seperti ketidakakuratan data stok, kesulitan dalam pemantauan persediaan barang per varian ukuran, lambatnya proses transaksi penjualan, serta tidak tersedianya laporan keuangan yang terstruktur dan akurat. Penelitian ini bertujuan untuk merancang, membangun, dan mengevaluasi Sistem Informasi Penjualan dan Persediaan Barang Berbasis Web pada Toko Pakaian Brad guna mengatasi permasalahan tersebut. Metode pengembangan sistem yang digunakan adalah *Waterfall* dengan pemodelan sistem menggunakan *Unified Modeling Language* (UML). Sistem dibangun menggunakan *framework Laravel* berbasis PHP dan MySQL sebagai sistem manajemen basis data, dengan menerapkan mekanisme *Role Based Access Control* (RBAC) untuk tiga level pengguna yaitu admin, kasir, dan pemilik. Fitur utama sistem meliputi pengelolaan data produk beserta varian ukuran, pencatatan transaksi barang masuk dengan penambahan stok otomatis, modul kasir *Point of Sale* (POS) dengan pemotongan stok per ukuran secara *real-time*, kalkulasi Harga Pokok Penjualan (HPP) dan laba kotor, serta pelaporan keuangan dengan fitur *export* PDF. Pengujian sistem dilakukan menggunakan dua metode, yaitu *Black Box Testing* terhadap 33 kasus uji yang menghasilkan tingkat keberhasilan sebesar 100% dengan seluruh fungsi sistem berjalan sesuai kebutuhan fungsional, serta pengujian *System Usability Scale* (SUS) yang menghasilkan skor sebesar 85,2 dan berada pada kategori *best imaginable*. Hasil penelitian menunjukkan bahwa sistem yang dibangun mampu meningkatkan efisiensi dan akurasi dalam pengelolaan data penjualan, persediaan barang, dan pelaporan keuangan Toko Pakaian Brad secara efektif.

Kata Kunci: Sistem Informasi, Penjualan, Persediaan Barang, Laravel, *Black Box Testing*, *System Usability Scale*

ABSTRACT

Fandy Galih Saputra. 2026. Design and Construction of a Website-Based Sales and Inventory Information System at Brad Clothing Store. Thesis. Informatics Engineering Study Program, FT, Universitas PGRI Madiun. Supervisor (I) Sri Anardani, S.Kom., M.T. (II) Slamet Riyanto, S.T., M.M.

Brad Clothing Store is a retail clothing business that still relies on manual recording in its operational activities, causing various problems such as inaccurate stock data, difficulty in monitoring inventory per size variant, slow sales transaction processes, and the unavailability of structured and accurate financial reports. This research aims to design, develop, and evaluate a Web-Based Sales and Inventory Information System at Brad Clothing Store to overcome these problems. The system development method used is the Waterfall method with system modeling using the Unified Modeling Language (UML). The system was built using the Laravel framework based on PHP and MySQL as the database management system, implementing a Role Based Access Control (RBAC) mechanism for three user levels, namely admin, cashier, and owner. The main features of the system include product data management with size variants, recording of incoming goods transactions with automatic stock additions, a Point of Sale (POS) cashier module with real-time stock deduction per size, calculation of Cost of Goods Sold (COGS) and gross profit, as well as financial reporting with PDF export features. System testing was carried out using two methods, namely Black Box Testing on 33 test cases which resulted in a success rate of 100% with all system functions running according to functional requirements, and System Usability Scale (SUS) testing which produced a score of 85,2 and is in the best imaginable category. The results of this research indicate that the system built is able to improve efficiency and accuracy in managing sales data, inventory, and financial reporting of Brad Clothing Store effectively.

Keywords: *Information System, Sales, Inventory, Laravel, Black Box Testing, System Usability Scale*