

INTISARI

Transformasi digital pada sektor UMKM menjadi kebutuhan strategis untuk meningkatkan efisiensi operasional dan daya saing usaha. Toko Roti Dapoer Alya sebagai pelaku UMKM menghadapi kendala sistem transaksi manual yang menyebabkan keterlambatan, kesalahan pencatatan, dan ketidakefisienan dalam verifikasi pembayaran. Penelitian ini bertujuan untuk mengimplementasikan sistem payment gateway Midtrans pada website e-commerce toko tersebut guna mengotomatisasi proses pembayaran secara digital dan real-time. Metode pengembangan yang digunakan adalah metode Waterfall, meliputi analisis kebutuhan, perancangan, implementasi, pengujian, dan penerapan sistem. Hasil penelitian menunjukkan bahwa sistem payment gateway berhasil diintegrasikan menggunakan API Midtrans ke dalam website berbasis React dan Node.js. Pengujian dilakukan dengan metode black box testing, dan seluruh fitur utama seperti checkout, validasi pembayaran otomatis, serta notifikasi status transaksi berjalan sesuai harapan. Sistem ini mampu memverifikasi pembayaran secara otomatis dan mencatat transaksi secara akurat, sehingga mengurangi pekerjaan manual oleh admin dan meningkatkan efisiensi transaksi bagi pelanggan. Penerapan sistem ini mempercepat proses transaksi, meminimalkan risiko kesalahan manusia, dan mendukung layanan yang lebih profesional. Hasil ini menunjukkan bahwa integrasi sistem pembayaran digital dapat memberikan dampak positif bagi UMKM dalam menghadapi era ekonomi digital. Penelitian ini diharapkan menjadi referensi praktis bagi pelaku UMKM lain dalam mengadopsi teknologi transaksi daring.

Kata kunci: Payment Gateway, Midtrans, E-Commerce, Website, Transaksi Online

ABSTRACT

Digital transformation in the Micro, Small, and Medium Enterprises (MSMEs) sector has become a strategic necessity to improve operational efficiency and business competitiveness. Toko Roti Dapoer Alya, as a culinary-based MSME, faces issues with its manual transaction system, which leads to delays, recording errors, and inefficient payment verification. This study aims to implement a Midtrans payment gateway into the store's e-commerce website to automate the payment process in a real-time and digital manner. The development method used is the Waterfall model, covering requirements analysis, system design, implementation, testing, and deployment. The system was successfully integrated using the Midtrans API on a React and Node.js-based website. The testing phase applied the black box testing method, and results indicated that key features such as checkout, automatic payment validation, and transaction notifications performed as expected. The system can verify payments in real time and record them accurately, reducing manual administrative tasks and improving transaction efficiency. This implementation enhances transaction speed and documentation, providing both users and administrators with a more streamlined experience. The automation reduces human error risks, increases responsiveness, and supports better service quality. Overall, the study proves that integrating a payment gateway like Midtrans can significantly improve operational effectiveness for MSMEs in the digital era. This project is expected to be a practical reference for other small businesses aiming to adopt digital payment systems and strengthen their position in the e-commerce ecosystem.

Keywords: Payment Gateway, Midtrans, E-Commerce, Website, Online Transaction