

ABSTRAK

UMKM kue tradisional masih menghadapi kendala dalam proses penjualan, karena pencatatan pemesanan dan transaksi masih dilakukan secara manual sehingga menghambat efektivitas operasional dan jangkauan pemasaran. Penelitian ini bertujuan untuk merancang dan membangun sistem *e-commerce* berbasis *website* sebagai solusi untuk mendukung penjualan dan pengelolaan pesanan secara digital. Pengembangan sistem menggunakan metode *Rapid Application Development* (RAD) yang meliputi tahap perencanaan kebutuhan, perancangan, dan implementasi. Fitur utama yang dibangun meliputi manajemen produk, keranjang belanja, *checkout*, riwayat pesanan, serta pembayaran menggunakan QRIS. Pengujian dilakukan menggunakan *Black-Box Testing*, *User Acceptance Testing* (UAT), dan *Web Application Performance Testing* (WAPT). Hasil pengujian menunjukkan seluruh fungsi berjalan dengan baik, di mana pengujian *Black-Box* menghasilkan tingkat keberhasilan 100%, UAT mencapai 89,14%, serta performa sistem stabil pada pengujian WAPT dengan 20 pengguna aktif tanpa *error*. Berdasarkan hasil tersebut, sistem *e-commerce* yang dikembangkan dinyatakan layak dan mampu mendukung proses penjualan UMKM secara efektif.

Kata kunci: *E-commerce*, UMKM, *Website*, RAD, Pengujian

ABSTRACT

Traditional cake UMKM still face challenges in the sales process, as order recording and transaction management are conducted manually, which reduces operational efficiency and limits marketing reach. This study aims to design and develop a website-based e-commerce system as a solution to support digital sales and order management. The system development adopts the Rapid Application Development (RAD) method, which includes requirements planning, system design, and implementation stages. The main features developed include product management, shopping cart, checkout, order history, and QRIS-based payment. System testing was conducted using Black-Box Testing, User Acceptance Testing (UAT), and Web Application Performance Testing (WAPT). The test results indicate that all system functions operate properly, with Black-Box Testing achieving a 100% success rate, UAT reaching 89.14%, and stable system performance observed in WAPT with 20 active users without errors. Based on these results, the developed e-commerce system is considered feasible and capable of effectively supporting UMKM sales processes.

Keywords: *E-commerce, UMKM, Website, RAD, Testing*