

PERANCANGAN SISTEM INFORMASI PENJUALAN PADA TOKO PIA MATHILDA BALI MENGGUNAKAN METODE *RAPID APPLICATION DEVELOPMENT* (RAD)

Angelia Christy

ABSTRAK

Toko Pia Mathilda Bali masih mengandalkan pencatatan transaksi dan stok secara manual. Cara ini sangat rawan menyebabkan data hilang, terjadi salah catat, dan lambatnya proses rekapitulasi laporan keuangan. Masalah utamanya, pihak toko sering kesulitan memprediksi kebutuhan produksi secara akurat. Mengingat masa simpan kue pia cukup singkat, kelebihan produksi sering kali berujung pada kerugian finansial yang signifikan bagi toko. Sebagai solusi, penelitian ini merancang sistem informasi penjualan berbasis web menggunakan metode *Rapid Application Development* (RAD) agar proses pengembangannya cepat dan tepat sesuai dengan kebutuhan pihak toko. Sistem ini dibangun menggunakan bahasa pemrograman PHP dengan *framework* CodeIgniter 4 dan *database* MySQL, yang dirancang melalui pemodelan UML, lalu diuji kelayakannya menggunakan *Black Box Testing*. Sistem ini berhasil diterapkan dengan lancar. Fiturnya sudah mampu memotong stok secara otomatis, mencatat arus keluar masuk uang, serta menampilkan laporan arus kas secara *real-time*. Berkat riwayat transaksi yang terekam rapi, toko kini dapat lebih mudah menakar jumlah produksi kue ke depannya agar sisa barang terbuang dapat ditekan dan keuntungan toko maksimal.

Kata Kunci: Sistem Informasi, Penjualan, *Rapid Application Development*, Inventaris.

DESIGN OF A SALES INFORMATION SYSTEM AT TOKO PIA MATHILDA BALI USING THE RAPID APPLICATION DEVELOPMENT (RAD) METHOD

Angelia Christy

ABSTRACT

Toko Pia Mathilda Bali still relies on manual recording for its transactions and inventory. This method is highly susceptible to data loss, input errors, and delays in generating financial reports. The main problem is that the shop faces significant challenges in accurately forecasting production needs. Given the short shelf life of pia cakes, overproduction frequently results in significant financial losses for the business. As a solution, this study designs a web-based sales information system utilizing the Rapid Application Development (RAD) method to ensure rapid development that aligns perfectly with the shop's requirements. The system is built using PHP with the CodeIgniter 4 framework and MySQL database, designed through UML modeling, and evaluated for its feasibility using Black Box Testing. This sales information system was successfully implemented. Its features include automatic stock deduction, cash flow tracking, and real-time generation of cash flow reports. With a systematically recorded transaction history, the shop can now estimate future cake production volumes with greater precision, minimizing product waste and maximizing profitability.

Keywords: *Information System, Sales, Rapid Application Development, Inventory.*