

ABSTRACT

Konter +62, located in Luragung, Kuningan, faces challenges in its item Inventory management, which is still conducted manually. This manual process, particularly in tracking smartphones by the unique IMEI number for each unit, leads to time inefficiency, a high risk of recording errors, and delays in report generation for decision-making. This research aims to design, build, and test the feasibility of a web-based Item Inventory Information System as a solution to these problems. The research method employed is Research and Development (RnD) with the Rapid Application Development (RAD) model, which is iterative and user-centric. System feasibility was evaluated through two stages: functionality testing using the black-box method by an ICT expert, and usability testing administered to 4 end-users via a Likert scale questionnaire. The functionality testing results showed that 100% of the test cases were concluded as 'Valid' and functioned as expected. Meanwhile, the usability testing yielded a mean score of 4.69 out of 5, placing it in the 'Highly Feasible' category. Therefore, it is concluded that the developed system is successful, functional, and well-accepted by its users, making it feasible for implementation to enhance the efficiency and accuracy of Inventory management at Konter +62.

Keywords: *Inventory Information System, Research and Development (RnD), Rapid Application Development (RAD), Black-Box Testing, Laravel.*

ABSTRAK

Konter +62 di Luragung, Kuningan, menghadapi kendala dalam pengelolaan inventaris barang yang masih dilakukan secara manual. Proses manual ini, terutama dalam pelacakan smartphone berdasarkan nomor IMEI yang unik untuk setiap unit, menyebabkan inefisiensi waktu, risiko tinggi kesalahan pencatatan, dan keterlambatan dalam penyusunan laporan untuk pengambilan keputusan. Penelitian ini bertujuan untuk merancang, membangun, dan menguji kelayakan sebuah Sistem Informasi *Inventory* Barang berbasis web sebagai solusi atas permasalahan tersebut. Metode penelitian yang digunakan adalah *Research and Development* (RnD) dengan model pengembangan *Rapid Application Development* (RAD) yang bersifat iteratif dan berpusat pada pengguna. Pengujian kelayakan sistem dilakukan melalui dua tahap: pengujian fungsionalitas dengan metode *Black-Box Testing* oleh seorang ahli di bidang TIK, dan pengujian usability kepada 4 pengguna akhir menggunakan kuesioner skala Likert. Hasil pengujian fungsionalitas menunjukkan bahwa 100% kasus uji yang dijalankan dinyatakan valid dan berfungsi sesuai harapan. Sementara itu, hasil pengujian usability menghasilkan skor rata-rata sebesar 4.69 dari skala 5, yang masuk dalam kategori "Sangat Layak". Berdasarkan hasil tersebut, dapat disimpulkan bahwa sistem yang dikembangkan berhasil, fungsional, dan sangat diterima oleh pengguna, sehingga layak untuk diimplementasikan guna meningkatkan efisiensi dan akurasi manajemen *Inventory* di Konter +62.

Kata Kunci: Sistem Informasi *Inventory*, *Research and Development* (RnD), *Rapid Application Development* (RAD), *Black-Box Testing*, Laravel.