

## ABSTRAK

Marliana, Siti 2022. *Rancang Bangun Aplikasi Tracking Barang Berbasis Website dengan Metode Rapid Application Development (RAD) (Studi Kasus: PT. Sentral Artesis Jaya*, Skripsi. Tanjungpinang: Jurusan Teknik Informatika, Fakultas Teknik, Univeristas Maritim Raja Ali Haji. Pembimbing I: Nola Ritha, S.T.,M.Cs. Pembimbing II: Nurul Hayaty, S.T.,M.Cs.

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Perusahaan pendistribusian barang yaitu PT. Sentral Artesis Jaya memiliki dua anak perusahaan, *Healtea Living* dan *Kakao*. *Healtea Living* memproduksi teh kesehatan dan *Kakao* memproduksi biji kakao. Produk tersebut dikirim keseluruhan Indonesia dan Singapura melalui ekspedisi partner yaitu JNE, J&T dan SiCepat. Produk yang dikirim dapat di tracking oleh customer dengan website ekspedisi partner dan saat proses pengiriman adanya pergantian alamat pengiriman, hal tersebut terjadilah resi dummy menjadikan kinerja perusahaan melambat dan membuat customer bingung. Permasalahan ini membutuhkan solusi yaitu membuat aplikasi tracking barang dengan metode yang digunakan Rapid Application Development, tahapan dimulai dari *requirement planning*, *workshop design* (*design system* dan *UI/UX* atau *prototype*), *implementasi* dan *testing*.

Requirement planning dilakukan dengan studi literatur dan studi lapangan ke perusahaan, pada proses workshop design peneliti membuat UML, dilanjutkan pada menentukan user persona, design guideline, low fidelity, high fidelity hingga prototype, pada workshop design terjadi dua iterasi, setelah iterasi kedua sesuai lanjut pada implementasi desain kode, kemudian dilanjutkan pada proses testing aplikasi. Penerapan metode rapid application development dalam penelitian ini sukses diterapkan diukur dari 71 hari yang peneliti perlukan untuk menerapkan metode RAD, sementara berdasarkan kebutuhan user penelitian ini diukur menggunakan pengujian black box dan UAT, hasil dari UAT yaitu 90,7%, menurut Priyatna, (2020) hasil tersebut masuk kategori interpretasi skor sangat kuat, dan artinya aplikasi sudah sesuai dengan kebutuhan user.

**Kata kunci:** *Airway Bill, Black Box, Rapid Application Development, Tracking, User Acceptance Test.*

## ABSTRACT

Marliana, Siti. 2022. *Design and Build a Website-Based Goods Tracking Application with the Rapid Application Development (RAD) Method (Case study: PT. Sentral Artesis Jaya)*, Skripsi. Tanjungpinang: Department of Informatics Engineering, Faculty of Engineering, Raja Ali Haji Maritime University. Advisor: Nola Ritha, S.T., M.Cs. Co-advisor: Nurul Hayaty, S.T., M.Cs.

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A goods distribution company, namely PT. Sentral Artesis Jaya, has two subsidiaries, Healtea Living and Kakao. Healtea Living produces healthy teas, and Kakao produces cocoa beans. These products are sent throughout Indonesia and Singapore through partner expeditions, namely JNE, J&T, and SiCepat. Products sent can be tracked by the customer with the expedition partner's website, and during the delivery process, there is a change in shipping address; a dummy receipt is issued, which causes the company's performance to slow down and confuse customers. This problem requires a solution, namely making an item tracking application with the method used by rapid application development, the stages starting from requirements planning, design workshops (system design and UI/UX or prototype), implementation, and testing.

Requirement planning is carried out by means of literature studies and field studies of companies, during the design workshop process the researcher makes UML, followed by determining user personas, design guidelines, low fidelity, high fidelity to prototypes, in the design workshop there are two iterations, after the second iteration according to continue implementation of the code design, then proceed to the application testing process. The application of the rapid application development method in this study was successfully implemented, as measured by the 71 days it took researchers to apply the RAD method. Based on user needs, this research was measured using black box testing and UAT, and the results of the UAT were 90.7%, according to Priyatna (2020). These results fall into the category of "very strong score interpretation," which means that the application is in accordance with user needs.

**Keyword:** *Airway Bill, Black Box, Rapid Application Development, Tracking, User Acceptance Test.*