# ABSTRAK

PT.Respatindo Surabaya merupakan suatu perusahaan yang bergerak di bidang jasa yaitu layanan distribusi barang. Dikarenakan luasnya wilayah Kota Surabaya maka dalam proses pendistribusian barang perlu dilakukan penentuan pola rute pendistribusian terpendek dari semua rute yang ada sehingga memperoleh jarak dan waktu tempuh yang terbaik. Untuk menyelesaikan permasalahan yang ada di PT.Respatindo Surabaya dapat menggunakan Metode Travelling Salesman Problem dan untuk pengembangan sistem akan menggunakan metode tradisional pengembang perangkat lunak, metode waterfall. Dengan menggunakan metode tersebut dapat menentukan jarak dan waktu tempuh yang terbaik. Dengan menggunakan metode Travelling Salesman Problem perusahaan logistik akan lebih diuntungkan dengan jarak serta waktu pengiriman menjadi lebih baik. Hasil desain dan implementasi sistem ini diharapkan dapat memenuhi kebutuhan perusahaan logistik. Sistem yang dikembangkan dapat memudahkan penggunaan dalam mengelola proses pengiriman logistik. Untuk mengevaluasi kualitas pengalaman pengguna dalam penggunaan sistem yang dikembangkan, dilakukan pengujian menggunakan metode Short UEQ (*Usability Evaluation Questionnaire*). Pengujian ini bertujuan untuk mengukur kepuasan dan efektivitas sistem dari perspektif pengguna.

**Kata Kunci:** Implementasi, Travelling Salesman Problem, Rute Distribusi .

# *ABSTRACT*

*PT. Respatindo Surabaya is a company engaged in the field of services, specifically providing distribution services for goods. Due to the vast area of Surabaya City, determining the shortest distribution route is crucial to minimize distance and travel time during the delivery process. To address this issue, PT. Respatindo Surabaya employs the Travelling Salesman Problem (TSP) method, and for system development, it utilizes the traditional software development method known as the waterfall method. By using these methods, the company aims to determine the best distance and travel time for its distribution operations. Implementing the Travelling Salesman Problem method is expected to benefit the logistics company by improving delivery distances and times. The design and implementation of this system are anticipated to meet the logistics company's needs and streamline the management of the logistics delivery process. To evaluate the quality of user experience in utilizing the developed system, a testing process is conducted using the Short Usability Evaluation Questionnaire (Short UEQ) method. This testing is aimed at measuring user satisfaction and system effectiveness from the users' perspective. The results of the evaluation using the Short UEQ method lead to the conclusion that the system received a "Good" rating with a satisfactory average score. This indicates that the developed system successfully meets user expectations and requirements, providing a positive user experience in managing the logistics delivery process.*



***Keywords:*** *Implementation, Traveling Salesman Problem, Distribution Route.*